

401 KAR 51:001. Definitions for 401 KAR Chapter 51.

RELATES TO: KRS 224.01-010, 224.20-100, 224.20-110, 224.20-120, 40 CFR Chapter I, Part 50, Appendices A to K, 51.100(s), 51.121 as amended at 65 FR 11222 (March 2, 2000), 53, 60, Appendices A and B, 61, Appendix B, 75, 96, 42 USC 7410 to 7671q

STATUTORY AUTHORITY: KRS 224.10-100(5)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) requires the Natural Resources and Environmental Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation defines the terms used in 401 KAR Chapter 51. The definitions contained in this administrative regulation, which have corresponding federal definitions, are not more stringent nor otherwise different than the corresponding federal definitions.

Section 1. Definitions.

- (1) "Acid rain emissions limitation" means a limitation on emissions of SO₂ or NO_x imposed by the Acid Rain Program under 42 USC 7651 to 7651o.
- (2) "Affected facility" means an apparatus, building, operation, road, or other entity or series of entities which emits or may emit an air contaminant into the outdoor atmosphere.
- (3) "Air contaminant" is defined in KRS 224.01-010(1).
- (4) "Air pollutant" means air contaminant.
- (5) "Air pollution" is defined in KRS 224.01-010(3).
- (6) "Air pollution control equipment" means a mechanism, device or contrivance used to control or prevent air pollution, which is not, aside from air pollution control laws and administrative regulations, vital to production of the normal product of the source or to its normal operation.
- (7) "Allocate" or "allocation" means the determination by the cabinet of the number of NO_x allowances to be credited to a NO_x budget unit.
- (8) "Allocation period" means each three (3) year period beginning May 1, 2004.
- (9) "Alteration" means:
 - (a) The installation or replacement of air pollution control equipment at a source; or
 - (b) A physical change in or change in the method of operation of an affected facility which increases the potential to emit a pollutant (to which a standard applies) emitted by the facility or which results in the emission of an air pollutant (to which a standard applies) not previously emitted.
- (10) "Alternative method" means a method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but which has been demonstrated to the cabinet's and the U.S. EPA's satisfaction to produce adequate results for its determination of compliance.

- (11) "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.
- (12) "Ambient air quality standard" means a numerical expression of a specified concentration level for a particular air contaminant and the time averaging interval over which that concentration level is measured and is a goal to be achieved in a stated time through the application of appropriate preventive or control measures.
- (13) "ANSI" means American National Standards Institute.
- (14) "AOAC" means Association of Official Analytical Chemists.
- (15) "ASTM" means American Society for Testing and Materials.
- (16) "BOD" means biochemical oxidant demand.
- (17) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.
- (18) "BTU" means British thermal unit.
- (19) "° C" means degree Celsius (centigrade).
- (20) "Cabinet" is defined in KRS 224.01-010(9).
- (21) "Cal" means calorie.
- (22) "Capital expenditure" means an expenditure for a physical or operational change to an affected facility that:
 - (a) Exceeds the product of:
 - 1. The applicable "annual asset guidelines repair allowance percentage" specified in the Internal Revenue Service (IRS) Publication 534; and
 - 2. The affected facility's basis, as defined by 26 USC 1012; and
 - (b) Is not reduced by an excluded addition as defined in IRS Publication 534.
- (23) "cfm" means cubic feet per minute.
- (24) "CH₄" means methane.
- (25) "Clinker" means the product of a portland cement kiln from which finished cement is manufactured by milling and grinding.
- (26) "CO" means carbon monoxide.
- (27) "CO₂" means carbon dioxide.
- (28) "COD" means chemical oxidant demand.
- (29) "Combined cycle system" means a system comprised of one (1) or more combustion turbines, heat recovery steam generators, or steam turbines

configured to improve overall efficiency of electricity generation or steam production.

- (30) "Combustion turbine" means an enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.
- (31) "Commence" means that an owner or operator has undertaken a continuous program of construction, modification, or reconstruction of an affected facility, or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction, modification, or reconstruction of an affected facility.
- (32) "Commence commercial operation" means to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use. Except as provided in 401 KAR 51:195 or 40 CFR 96.5:
 - (a) For a unit that is a NOx budget unit under 40 CFR 96.4, on the date the unit commences commercial operation, the date remains the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered.
 - (b) For a unit that is not a NOx budget unit under 40 CFR 96.4, on the date the unit commences commercial operation, the date the unit becomes a NOx budget unit under 40 CFR 96.4 is the unit's date of commencement of commercial operation.
- (33) "Commence operation" means, for a NOx budget unit, to have begun a mechanical, chemical, or electronic process, including start-up of a unit's combustion chamber. Except as provided in 401 KAR 51:195 or 40 CFR 96.5:
 - (a) For a unit that is a NOx budget unit under 40 CFR 96.4 on the date of commencement of operation, the date remains the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered.
 - (b) For a unit that is not a NOx budget unit under 40 CFR 96.4 on the date of commencement of operation, the date the unit becomes a NOx budget unit under 40 CFR 96.4 is the unit's date of commencement of operation.
- (34) "Compliance schedule" means a time schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with a limitation or standard.
- (35) "Compliance supplement pool" means the quantity of NOx allowances provided to Kentucky by the U.S. EPA to be:
 - (a) Allocated to NOx budget units that achieve early reduction; or
 - (b) Used to assist NOx budget sources that are unable to meet the compliance deadline as provided in 401 KAR 51:180, Section 5.
- (36) "Construction" means fabrication, erection, installation or modification of an air contaminant source.

- (37) "Continuous emission monitoring system for NO_x" or "CEMS for NO_x" means the equipment required by 40 CFR 96.70 to 96.76 to sample, analyze, measure, and provide, by readings taken at least once every fifteen (15) minutes of the measured parameters, a permanent record of NO_x emissions, expressed in tons per hour for NO_x. The following systems are necessary component parts, as required by 40 CFR Part 75, included in a continuous emission monitoring system:
- (a) Flow monitor;
 - (b) NO_x pollutant concentration monitor;
 - (c) Diluent gas monitor (O₂ or CO₂) if required by 40 CFR 96.70 to 96.76;
 - (d) Continuous moisture monitor if required by 40 CFR 96.70 to 96.76; and
 - (e) Automated data acquisition and handling system.
- (38) "Continuous monitoring system" means the total equipment, required under the applicable administrative regulations used to sample, to condition (if applicable), to analyze and to provide a permanent record of emissions or process parameters.
- (39) "Control period" means:
- (a) For the year 2004, the period beginning May 31, 2004, and ending September 30, 2004, inclusive; and
 - (b) For all other years, the period beginning May 1 of a year and ending September 30 of the same year, inclusive.
- (40) "Director" means Director of the Division for Air Quality of the Natural Resources and Environmental Protection Cabinet.
- (41) "District" is defined in KRS 224.01-010(11).
- (42) "dscf" means dry cubic feet at standard conditions.
- (43) "dscm" means dry cubic meter at standard conditions.
- (44) "Electric generating unit" means a fossil fuel-fired boiler, combustion turbine, or a combined cycle system used to generate twenty-five (25) megawatts or more of electricity, some of which is offered for sale.
- (45) "Emission standard" means that numerical limit which fixes the amount of an air contaminant or air contaminants that may be vented into the atmosphere from an affected facility or from air pollution control equipment installed in an affected facility.
- (46) "Enforceable as a practical matter" means that the emission or other standards contained in a permit or compliance schedule include:
- (a) Technically accurate emission standards, and the portions of the source that are subject to the standards;
 - (b) A time period adequate to demonstrate compliance with the standards; and

- (c) The method the source will use to achieve and demonstrate compliance with the limitations and standards, including appropriate monitoring, recordkeeping, and reporting.
- (47) "Equivalent method" means a method of sampling and analyzing for an air pollutant which has been demonstrated to the cabinet's and the U.S. EPA's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
- (48) "Excess NOx emissions" means any tonnage of nitrogen oxides emitted by a NOx budget unit during a control period that exceeds the NOx budget emissions limitation for the unit.
- (49) "Exempt solvent" means an organic compound listed in the definition of volatile organic compound as not participating in atmospheric photochemical reactions.
- (50) "Existing source" means a source which is not a new source.
- (51) "Extreme nonattainment county" or "extreme nonattainment area" means a county or portion of a county designated extreme nonattainment for the one (1) hour national ambient air quality standard for ozone in 401 KAR 51:010.
- (52) "° F" means degree Fahrenheit.
- (53) "Federally-enforceable permit" means a permit issued under 401 KAR 52:020 or 401 KAR 52:030, as appropriate.
- (54) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (55) "Fossil fuel" means natural gas, petroleum, coal, or a form of solid, liquid, or gaseous fuel derived from natural gas, petroleum, or coal.
- (56) "Fossil fuel fired" means, for a unit:
 - (a) The combustion of fossil fuel, alone or in combination with another fuel, if the fossil fuel combusted comprises more than fifty (50) percent of the annual heat input on a BTU basis during a year starting in 1995 or, if a unit had no heat input starting in 1995, during the last year of operation of the unit prior to 1995; or
 - (b) The combustion of fossil fuel, alone or in combination with another fuel, if the fossil fuel is projected to comprise more than fifty (50) percent of the annual heat input on a BTU basis during a year, and the unit is to be fossil fuel fired as of the date during the year the unit begins combusting fossil fuel.
- (57) "ft" means feet or foot.
- (58) "Fuel" means natural gas, petroleum, coal, wood, or a form of solid, liquid, or gaseous fuel derived from these materials for the purpose of creating useful heat.
- (59) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

- (60) "g" means gram.
- (61) "gal" means gallon.
- (62) "General fund" is defined in KRS 48.010(13)(a).
- (63) "Generator" means a device that produces electricity.
- (64) "gr" means grain.
- (65) "HCl" means hydrochloric acid.
- (66) "Heat input" means the product (in MMBTU per unit of time) of the gross calorific value of the fuel (in BTU per lb) and the fuel feed rate into a combustion device (in mass of fuel per unit of time) that:
 - (a) Does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources; and
 - (b) Is measured, recorded, and reported to the cabinet by the NO_x authorized account representative in accordance with 40 CFR 96.70 to 96.76.
- (67) "Hg" means mercury.
- (68) "HF" means hydrogen fluoride.
- (69) "hr" means hour.
- (70) "Hydrocarbon" means an organic compound consisting predominantly of carbon and hydrogen.
- (71) "H₂O" means water.
- (72) "H₂S" means hydrogen sulfide.
- (73) "H₂SO₄" means sulfuric acid.
- (74) "in" means inch.
- (75) "Incineration" means the process of igniting and burning solid, semisolid, liquid, or gaseous combustible wastes.
- (76) "Industrial boiler or turbine" means a fossil fuel-fired boiler, combustion turbine, or a combined cycle system having a maximum design heat input of 250 MMBTU per hour or more that is not an electric generating unit.
- (77) "Intermittent emissions" means emissions of particulate matter into the open air from a process which operates for less than any six (6) consecutive minutes.
- (78) "J" means joule.
- (79) "Kg" means kilogram.
- (80) "l" means liter.
- (81) "lb" means pound.

- (82) "Long dry kiln " means a kiln that employs no preheating of the feed and has a dry inlet feed.
- (83) "Long wet kiln" means a kiln that employs no preheating of the feed and the inlet feed to the kiln is a slurry.
- (84) "m" means meter.
- (85) "m3" means cubic meter.
- (86) "Major source" means a source of which the potential emission rate is equal to or greater than 100 tons per year of any one (1) of the following pollutants: particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds or carbon monoxide.
- (87) "Malfunction" means a sudden and infrequent failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner that is not caused entirely or in part by poor maintenance, careless operation, or other upset condition or equipment breakdown that could have been reasonably prevented.
- (88) "Marginal nonattainment county" or "marginal nonattainment area" means a county or portion of a county designated marginal nonattainment for the one (1) hour national ambient air quality standard for ozone in 401 KAR 51:010.
- (89) "Maximum design heat input" means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.
- (90) "Maximum potential hourly heat input" means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input and is:
- (a) A value calculated according to 40 CFR Part 75 using the maximum fuel flow rate and the maximum gross calorific value, if the unit intends to use 40 CFR Part 75, Appendix D to report heat input; or
 - (b) A value reported according to 40 CFR Part 75 using the maximum potential flow rate and either the maximum percent CO₂ concentration (in percent CO₂) or the minimum percent O₂, if the unit intends to use a flow monitor and a diluent gas monitor.
- (91) "Maximum potential NO_x emission rate" means the emission rate of NO_x (in lb per MMBTU) calculated according to 40 CFR 75, Appendix F, Section 3, using the maximum potential NO_x concentration as defined in 40 CFR 75, Appendix A, Section 2, and the maximum percent O₂ or the minimum percent CO₂ under all operating conditions of the unit except for unit startup, shutdown, and malfunction.
- (92) "Maximum rated hourly heat input" means a unit specific maximum hourly heat input (MMBTU) which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.
- (93) "Mid-kiln firing " means the secondary firing in kilns by injecting solid fuel at an intermediate point in the kiln using a specially designed feed injection mechanism for the purpose of decreasing NO_x emissions through:

- (a) Burning part of the fuel at a lower temperature; and
 - (b) Reducing-conditions at the solid waste injection point that may destroy some of the NOx formed upstream in the kiln burning zone.
- (94) "min" means minute.
- (95) "mg" means milligram.
- (96) "m g" means microgram.
- (97) "MJ" means megajoules.
- (98) "MM" means million.
- (99) "mm" means millimeter.
- (100) "mo" means month.
- (101) "Moderate nonattainment county" or "moderate nonattainment area" means a county or portion of a county designated moderate nonattainment for the one (1) hour national ambient air quality standard for ozone in 401 KAR 51:010.
- (102) "Modification" means a physical change in, or a change in the method of operation of, an affected facility which:
- (a) Increases the amount of a regulated air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of a regulated air pollutant into the atmosphere not previously emitted; and
 - (b) Is not solely:
 - 1. Maintenance, repair, or replacement that the cabinet determines to be routine for a source category;
 - 2. An increase in production rate of an affected facility, if that increase can be accomplished without a capital expenditure on that facility;
 - 3. An increase in the hours of operation;
 - 4. Use of an alternative fuel or raw material if, prior to the date a standard becomes applicable to that source type, the affected facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change;
 - 5. Conversion to coal required for energy considerations, as specified in 42 USC 7411(a) (8);
 - 6. The addition or use of a system or device whose primary function is the reduction of air pollutants, unless an emission control system is removed or is replaced by a system which the cabinet determines to be less environmentally beneficial; or

7. The relocation or change in ownership of a source.

- (103) "Monitoring device" means the total equipment, required in applicable administrative regulations, used to measure and record (if applicable) process parameters.
- (104) "Monitoring system" means a monitoring system that meets the requirements of 40 CFR Part 96.
- (105) "MWe" means megawatt electrical.
- (106) "N2" means nitrogen.
- (107) "Nameplate capacity" means the maximum electrical generating output (in MWe) that a generator can sustain over a specified period of time if not restricted by seasonal or other deratings as measured with United States Department of Energy standards.
- (108) "New source" means a source, the construction, reconstruction, or modification of which commenced on or after the classification date as defined in the applicable administrative regulation, irrespective of a change in emission rate.
- (109) "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods specified by the cabinet.
- (110) "ng" means nanograms.
- (111) "NO" means nitric oxide.
- (112) "NO2" means nitrogen dioxide.
- (113) "NOx" means nitrogen oxides.
- (114) "NOx allowance" means an authorization to emit one (1) ton of NOx during a control period under the NOx Budget Trading Program.
- (115) "NOx Allowance Tracking System (NATS)" means the system by which the U.S.EPA records allocations, deductions, and transfers of NOx allowances under the NOx Budget Trading Program.
- (116) "NOx authorized account representative" means the natural person who is authorized by the owner or operator to:
 - (a) Represent and legally bind the owner and operator in all matters pertaining to the NOx Budget Trading Program in accordance with 40 CFR 96, Subpart B for a NOx budget source and all NOx budget units at the source; and
 - (b) Transfer or otherwise dispose of NOx allowances held in the general account in accordance with 40 CFR 96, Subpart F, for a general account.
- (117) "NOx budget emissions limitation" means, for a NOx budget unit, the tonnage equivalent of the NOx allowances available for compliance deduction for the unit and for a control period under 401 KAR 51:160 adjusted by deductions of sufficient NOx allowances to account for:
 - (a) Actual utilization under 40 CFR 96.42(e) for the control period;

- (b) Excess NOx emissions for a prior control period under 40 CFR 96.54(d);
 - (c) Withdrawal from the NOx budget program under 40 CFR 96.86; or
 - (d) A change in regulatory status for a NOx budget opt-in source under 40 CFR 96.87.
- (118) "NOx budget opt-in source" means an affected facility that has elected to become a NOx budget unit under the NOx Budget Trading Program and whose NOx budget opt-in permit has been issued and is in effect.
- (119) "NOx budget source" means a source that includes one (1) or more NOx budget units.
- (120) "NOx Budget Trading Program" means the multistate NOx air pollution control and emission reduction program established and administered by the U.S. EPA under 40 CFR 51.121 or 52.34, as a means of mitigating the interstate transport of O3, O3 precursors, and NOx.
- (121) "NOx budget unit" means a unit that is subject to the NOx Budget Trading Program emissions limitation under 401 KAR 51:160 or 40 CFR 96.80.
- (122) "NOx budget unit operator" means a person who operates, controls, or supervises a NOx budget unit, a NOx budget source, or a unit for which an application for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not denied or withdrawn and includes a holding company, utility system, or plant manager of a NOx budget unit or source.
- (123) "NOx budget unit owner" means:
- (a) A holder of a portion of the legal or equitable title in a NOx budget unit or in a unit for which an application for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not denied or withdrawn;
 - (b) A holder of a leasehold interest in a NOx budget unit or in a unit for which an application for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not denied or withdrawn;
 - (c) A purchaser of power from a NOx budget unit or from a unit for which an application for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not denied or withdrawn under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, NOx budget unit owner shall not include a passive lessor, or a person who has an equitable interest through the lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the NOx budget unit or the unit for which an application for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not denied or withdrawn; or
 - (d) For any general account, a person who has an ownership interest with respect to the NOx allowances held in the general account and who is subject to the binding agreement for the NOx authorized account representative to represent that person's ownership.
- (124) "O2" means oxygen.

- (125) "O3" means ozone.
- (126) "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
- (127) "Operating" means, for a NOx budget unit, having documented heat input for more than 876 hours in the six (6) months immediately preceding the submission of an application for an initial NOx budget permit.
- (128) "Operator" means, for a NOx budget unit, any person who operates, controls, or supervises a NOx budget unit, a NOx budget source, or unit for which an application for a NOx budget opt-in permit is submitted and not denied or withdrawn. The operator shall include any holding company, utility system, or plant manager of the unit or source.
- (129) "Opt-in" means to be elected to become a NOx budget unit under the NOx Budget Trading Program through a final NOx budget opt-in permit.
- (130) "Owner" means, for a NOx budget unit, the following persons:
- (a) A holder of any portion of the legal or equitable title in a NOx budget unit or in a unit for which an application for a NOx budget opt-in permit under 40 CFR Part 96.83 is submitted and not denied or withdrawn;
 - (b) A holder of a leasehold interest in a NOx budget unit or in a unit for which an application for a NOx budget opt-in permit under 40 CFR Part 96.83 is submitted and not denied or withdrawn;
 - (c) A purchaser of power from a NOx budget unit or from a unit for which an application for a NOx budget opt-in permit under 40 CFR Part 96.83 is submitted and not denied or withdrawn under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through the lessor, whose rental payments are not based upon the revenues or income from the NOx budget unit or the unit for which an application for a NOx budget opt-in permit under 40 CFR Part 96.83 is submitted and not denied or withdrawn; or
 - (d) With respect to a general account, a person who has an ownership interest with respect to NOx allowances held in the general account and who is subject to the binding agreement for the NOx authorized account representative to represent that person's ownership interest with respect to NOx allowances.
- (131) "Owner or operator" means a person who owns, leases, operates, controls, or supervises an affected facility or a source to which an affected facility is a part.
- (132) "oz" means ounce.
- (133) "Particulate matter" means a material, except uncombined water, which exists in a finely divided form as a liquid or a solid as measured by the appropriate approved test method.
- (134) "Particulate matter emissions" means, except as used in 40 CFR 60, all finely divided solid or liquid material, other than uncombined water,

emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter I, or by a test method specified in the approved state implementation plan.

- (135) "Peak load" means the maximum instantaneous operating load.
- (136) "Permitted capacity factor" means the annual permitted fuel use divided by the manufacturer's specified maximum fuel consumption multiplied by 8,760 hours per year.
- (137) "Person" is defined by KRS 224.01-010(17).
- (138) "PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured by a reference method based on 40 CFR 50, Appendix J and designated in accordance with 40 CFR 53, or by an equivalent method designated in accordance with 40 CFR 53.
- (139) "PM10 emissions" means finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method, specified in 40 CFR Chapter I, or by a test method specified in the approved state implementation plan.
- (140) "Portland cement" means a hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates.
- (141) "Portland cement kiln" means a system, including solid, gaseous or liquid fuel combustion equipment, used to calcine and fuse raw materials, including limestone and clay, to produce Portland cement clinker.
- (142) "Potential to emit" or "PTE" means the maximum capacity of a stationary source to emit a regulated air pollutant given its physical and operational design, where:
 - (a) A physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable as a practical matter; and
 - (b) This definition does not alter or affect the use of this term for other purposes of the Act or the term "capacity factor" as used in the Acid Rain Program.
- (143) "ppb" means parts per billion.
- (144) "ppm" means parts per million.
- (145) "ppm(w/w)" means parts per million (weight by weight).
- (146) "Precalciner kiln" means a kiln where the feed to the kiln system is preheated in cyclone chambers and utilizes a second burner to calcine material in a separate vessel attached to the preheater prior to the final fusion in a kiln which forms clinker.
- (147) "Preheater kiln" means a kiln where the feed to the kiln system is

preheated in cyclone chambers prior to the final fusion in a kiln which forms clinker.

- (148) "psia" means pounds per square inch absolute.
- (149) "psig" means pounds per square inch gage.
- (150) "Reconstruction" means the replacement of components of an existing affected facility to the extent that:
 - (a) The fixed capital cost of the new components exceeds fifty (50) percent of the fixed capital cost that would be required to construct a comparable entirely new affected facility; and
 - (b) It is technologically and economically feasible to meet the applicable requirements of 401 KAR Chapters 50 to 65.
- (151) "Reference method" means a method of sampling and analyzing for an air pollutant as prescribed by 40 CFR 50, Appendices A to N; 40 CFR 60, Appendices A and B; and 40 CFR 61, Appendix B.
- (152) "Run" means the net period of time, either intermittent or continuous, within the limits of good engineering practice during which an emission sample is collected.
- (153) "S" means at standard conditions.
- (154) "sec" means second.
- (155) "Secondary emissions" means emissions that:
 - (a) 1. Occur as a result of the construction or operation of a major stationary source or major modification; and 2. Do not come from the major stationary source or major modification itself;
 - (b) Are specific, well defined, quantifiable, and impact the same general area as the stationary source modification which caused the secondary emissions;
 - (c) Include emissions from an offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification; and
 - (d) Does not include emissions which come directly from a mobile source, including emissions from the tailpipe of a motor vehicle, a train, or vessel.
- (156) "Serious nonattainment county" or "serious nonattainment area" means a county or portion of a county designated serious nonattainment for the one (1) hour national ambient air quality standard for ozone in 401 KAR 51:010.
- (157) "Severe nonattainment county" or "severe nonattainment area" means a county or portion of a county designated severe nonattainment for the one (1) hour national ambient air quality standard for ozone in 401 KAR 51:010.
- (158) "Shutdown" means the cessation of an operation.

- (159) "SO₂" means sulfur dioxide.
- (160) "Source" means one (1) or more affected facilities contained within a given contiguous property line, which means the property is separated only by a public thoroughfare, stream, or other right of way.
- (161) "sq" means square.
- (162) "Stack or chimney" means a flue, conduit, or duct arranged to conduct emissions to the atmosphere.
- (163) "Standard" means an emission standard, a standard of performance, or an ambient air quality standard as promulgated in 401 KAR Chapters 50 to 65, including the emission control requirements necessary to comply with 401 KAR Chapter 51.
- (164) "Standard conditions":
- (a) For source measurements means twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) and a pressure of 760 mm Hg (29.92 in. of Hg).
 - (b) For the purpose of air quality determinations means twenty-five (25) degrees Celsius and a reference pressure of 760 mm Hg.
- (165) "Start-up" means the setting in operation of an affected facility.
- (166) "State implementation plan" or "SIP" means the most recently prepared plan or revision required by 42 USC 7410 which has been approved by the U.S. EPA.
- (167) "Submit" means to send or transmit a document, information, or correspondence in accordance with an applicable requirement.
- (168) "TAPPI" means Technical Association of the Pulp and Paper Industry.
- (169) "Ton" or "tonnage" means, for a NO_x budget source, a short ton (2,000 pounds). For determining compliance with the NO_x budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with 40 CFR 96, Subpart H with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one (1) ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons.
- (170) "Total suspended particulates" or "TSP" means particulate matter as measured by the method described in 40 CFR 50, Appendix B.
- (171) "tpy" means tons per year.
- (172) "TSS" means total suspended solids.
- (173) "Uncombined water" means water which can be separated from a compound by ordinary physical means and which is not bound to a compound by internal molecular forces.
- (174) "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.

- (175) "Urban county" means a county which is a part of an urbanized area with a population of greater than 200,000 based upon the 1980 census. If a portion of a county is a part of an urbanized area, then the entire county shall be classified as urban with respect to the administrative regulations of the Division for Air Quality.
- (176) "Urbanized area" means an area defined as such by the U.S. Department of Commerce, Bureau of Census.
- (177) "U.S. EPA" means the United States Environmental Protection Agency.
- (178) "UTM" means Universal Transverse Mercator.
- (179) "Volatile organic compound" or "VOC" means an organic compound that participates in atmospheric photochemical reactions. This includes an organic compound other than the following compounds: methane; ethane; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate; methylene chloride; 1,1,1-trichloroethane (methyl chloroform) trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12) chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1 chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C4F9OCH3); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OCH3); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OC2H5); methyl acetate; and perfluorocarbon compounds which fall into the following classes:
- (a) Cyclic, branched, or linear, completely fluorinated alkanes;
 - (b) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
 - (c) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations;
 - (d) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine; or

- (e) Other compounds that have negligible photochemical reactivity and which are inadvertently measured by test methods that have been approved by the cabinet and the U.S. EPA.

(180) "yd" means yard.

(18 Ky.R. 2737; Am. 2930; 3335; eff. 6-24-92; 21 Ky.R. 1757; 2137; eff. 4-6-95; 22 Ky.R. 1691; 2014; eff. 6-6-96; 25 Ky.R. 1442; eff. 4-14-99; 27 Ky.R. 2557; 3270; 38 Ky.R. 367; eff. 8-15-2001; 29 Ky.R.538; 1600; eff. 12-18-02.)

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg	OCT 20, 1992	JUN 23, 1994	59 FR 32343
1st Revision	MAY 04, 1995	JUN 13, 1995	60 FR 31087
2nd Revision	JUN 19, 1996	JAN 21, 1997	62 FR 2916
3rd Revision	JAN 31, 2002	APR 11, 2002	67 FR 17624
4th Revision	FEB 28, 2003	JUN 24, 2003	68 FR 37418

401 KAR 51:005. Purpose and general provisions.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division for Air Quality

Relates to: KRS 224.033

Pursuant to: KRS 13.082, 224.033

Necessity and Function: KRS 224.033 requires the Cabinet for Natural Resources and Environmental Protection to prescribe regulations for the prevention, abatement, and control of air pollution. This regulation establishes the general provisions as related to new sources with respect to the prevention of significant deterioration of air quality and construction of stationary sources impacting on non-attainment areas.

Section 1. Purpose. The purpose of this chapter is:

- (1) To prevent the significant deterioration of air quality in areas of Commonwealth of Kentucky where the air quality is better than the ambient air quality standards contained in 401 KAR 53:010; and
- (2) To provide conditions for the construction of new or modified sources which would impact on non-attainment areas in order that major new or major modified sources will not exacerbate existing violations of the ambient air quality standards.

Section 2. General Provisions.

- (1) Performance tests. The owner or operator of an affected facility subject to this chapter shall be subject to the provisions of 401 KAR 59:005, Section 2.
- (2) Notification and record keeping. The owner or operator of an affected facility subject to this chapter shall be subject to the provisions of 401 KAR 59:005, Section 3.
- (3) Monitoring. The cabinet may require the owner or operator of an affected facility subject to this chapter to install, calibrate, maintain and operate continuous emission monitoring system. All such continuous emission monitoring systems shall be subject to the provisions of 401 KAR 59:005, Section 4, and other provisions as the cabinet deems necessary.

Effective Date: June 6, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg	JUN 29, 1979	JUL 12, 1982	47 FR 30059

401 KAR 51:010. Attainment status designations.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division for Air Quality

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120, 40 CFR 81:318, 42 USC 7401-7626, 42 USC 7407, 7501-7515, 7601, 40 CFR -81,

STATUTORY AUTHORITY: KRS 224.10-100, 42 USC 7401-7626

NECESSITY AND FUNCTION: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation designates the status of all areas of the Commonwealth of Kentucky with regard to attainment of the ambient air quality standards.

Section 1. Definitions.

- (1) "Rest of State" as used in Sections 4 through 7 of this administrative regulation means the remainder of the state has been designated and identified on a county by county basis.
- (2) "Statewide" as used in Section 8 of this administrative regulation means the entire state has been designated on a county by county basis.
- (3) "Road" as used in Section 2(3) of this administrative regulation means a Kentucky route, a county road, a lane, a road, or a U.S. route, highway, or interstate.

Section 2. Attainment Status Designations.

- (1) The attainment status of areas of the Commonwealth of Kentucky with respect to the ambient air quality standards for sulfur dioxide, carbon monoxide, ozone, and nitrogen oxides is listed in Sections 5 through 8 of this administrative regulation. The attainment status of areas of the Commonwealth of Kentucky with respect to total suspended particulates is listed in Section 3 of this administrative regulation.
- (2) Within sixty (60) days of revision by the U.S. EPA of a national ambient air quality standard, the cabinet shall review applicable data and submit to the U.S. EPA a revision to the attainment nonattainment list pursuant to 42 USC 7407(d) (1).
- (3) A road, junction or intersection of two (2) or more roads as used in Section 7 of this administrative regulation that defines a nonattainment boundary for an area which is a portion of a county designated as nonattainment for ozone for any classification except marginal shall include as nonattainment an area extending 750 feet from the center of the road, junction, or intersection.

Section 3. Attainment Timetable. Primary and secondary ambient air quality standards shall be attained as expeditiously as practicable.

Section 4. Attainment Status Designations For Total Suspended Particulates.

Designated Areas	Does Not Meet Primary Standards	Does Not Meet Secondary Standard	Better Than Standards	Cannot Be Classified
Bell County			X	
Boyd County				X
That portion of Bullitt County in Shepherdsville			X	
That portion of Campbell County in Newport			X	
That portion of Daviess County in Owensboro bordered by the Ohio River on the north, by Frederica Street projected to the river on the west, by Fourth Street and U.S.60 on the south and by the Beltline (KY 212) projected to the river on the east				X
That portion of Henderson County in Henderson				X
Jefferson County				X
That portion of Lawrence County in Louisa				X
McCracken County			X	
Marshall County			X	
That portion of Madison County in Richmond				X
Muhlenberg County			X	
That portion of Perry County in Hazard				X
That portion of Pike County in Pikeville				X
That portion of Whitley County in Corbin			X	
Rest of State			X	

Section 5. Attainment Status Designations for Sulfur Dioxide.

Designated Areas	Does Not Meet Primary Standards	Does Not Meet Secondary Standards	Better Than Standards
That portion of Boyd County south of the Northern UTM line 4251Km	X	X	
Muhlenberg County		X	
Rest of State			X

Section 6. Attainment Status Designations for Carbon Monoxide.

Designated Areas	Does Not Meet Primary Standards	Cannot Be Classified or Better Than Standards
Jefferson County		X
Rest of State		X

Section 7. Attainment Status Designations for Ozone.

Designated Areas	Moderate	Marginal	Cannot Be Classified or Better Than Standards
Boone County	X		
Boyd County			X
That portion of Bullitt County within the boundaries described as follows:Beginning at the intersection of KY 1020 and the Jefferson-Bullitt County line proceeding to the east along the county line to the intersection of County Road 567 and the Jefferson-Bullitt County line;proceeding south on County Road 567 to the junction with KY 1116 (also known as Zoneton Road);proceeding to the south on KY 1116 to the junction with Hebron Lane; proceeding to the south on Hebron Lane to Cedar Creek;proceeding south on Cedar Creek to the confluence of Floyds Fork turning southeast along a creek that meets KY 44 at Stallings Cemetery; proceeding west along KY 44 to the eastern most point in the Shepherdsville city limits;proceeding south along the Shepherdsville city limits to the Salt River and west to a point across the river from Mooney Lane;proceeding south along Mooney Lane to the junction of KY 480; proceeding west on KY 480 to the junction with KY 2237;proceeding south on KY 2237 to the junction with KY 61 and proceeding north on KY 61 to the junction with KY 1494;proceeding south on KY 1494 to the junction with the perimeter of the Fort Knox Military Reservation;proceeding north along the military reservation perimeter to Castleman Branch Road;proceeding north on Castleman Branch Road to KY 44; proceeding a very short distance west on KY 44 to a junction with KY 2723; proceeding north on KY 2723 to the junction of Chillicoop Road;proceeding northeast on Chillicoop Road to the junction of KY 2673;proceeding north on KY 2673 to the junction of KY 1020; proceeding north on KY 1020 to the beginning.	X		
Caldwell County			X
Calloway County			X
Campbell County	X		

Christian County			X
Fayette County			X
That portion of Greenup County within the boundaries described as follows: Beginning at a point where the Ohio River meets the Greenup-Boyd County line; proceeding southwest along the Greenup-Boyd County line to the junction of the East Fork of the Little Sandy River and the Greenup-Boyd County line; proceeding north and west along the East fork of the Little Sandy River to the confluence of the Little Sandy River; proceeding north along the Little Sandy River to the confluence of the Ohio River; proceeding east along the Ohio River to the beginning.			X
Jefferson County	X		
Kenton	X		
That portion of Oldham County within the boundaries described as follows: Beginning at the intersection of the Oldham-Jefferson County line with the southbound lane of Interstate 71; proceeding to the northeast along the southbound lane of Interstate 71 to the intersection of KY 329 and the southbound lane of Interstate 71; proceeding to the northwest on KY 329 to the intersection of Zaring Road and KY 329; proceeding to the east-northeast on Zaring Road to the junction of Cedar Point Road and Zaring Road; proceeding to the north-northeast on Cedar Point Road to the junction of KY 393 and Cedar Point Road; proceeding to the south-southeast on KY 393 to the junction of the access road on the north side of Reformatory Lake and the Reformatory; proceeding to the east-northeast on the access road to the junction with Dawkins Lane and the access road; proceeding to follow an electric power line east-northeast across from the junction of County Road 746 and Dawkins Lane to the east-northeast across KY 53 on to the LaGrange Water Filtration Plant;	X		

proceeding on to the east-southeast along the power line then south across Fort Pickens Road to a power substation on KY 146;proceeding along the power line south across KY 146 and the Seaboard System Railroad track to adjoin the incorporated city limits of LaGrange;then proceeding east then south along the LaGrange city limits to a point abutting the north side of KY 712;proceeding east-southeast on KY 712 to the junction of Massie School Road and KY 712; proceeding to the south-southwest on Massie School Road to the intersection of Massie School Road and Zale Smith Road;proceeding northwest on Zale Smith Road to the junction of KY 53 and Zale Smith Road;proceeding on KY 53 to the north-northwest to the junction of new Moody Lane and KY 53; proceeding on new Moody Lane to the south-southwest until meeting the city limits of LaGrange;then briefly proceeding north following the LaGrange city limits to the intersection of the northbound lane of Interstate 71 and the LaGrange city limits; proceeding southwest on the northbound lane of Interstate 71 until intersecting with the north fork of Currys Fork;proceeding south-southwest beyond the confluence of Currys Fork to the south-southwest beyond the confluence of Floyds Fork continuing on to the Oldham-Jefferson County line; proceeding northwest along the Oldham-Jefferson County line to the beginning.			
Trigg County			X
Rest of State			X

Section 8. Attainment Status Designations for Nitrogen Oxides.

Designated Area	Does Not Meet Primary Standards	Cannot Be Classified or Better Than Standards
Statewide		X

Effective Date: November 12, 1997

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg	JUN 29, 1979	JAN 25, 1980	45 FR 6092
1st Revision	JUN 24, 1987	FEB 28, 1989	54 FR 8322
2nd Revision	JUL 07, 1988	FEB 07, 1990	55 FR 4169
3rd Revision	FEB 17, 1993	JUN 23, 1994	54 FR 32343
4th Revision	DEC 19, 1997	JUL 24, 1998	63 FR 39739

401 KAR 51:017. Prevention of significant deterioration of air quality.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division for Air Quality

RELATES TO: KRS 224.10-100; 40 CFR 51 Subpart I, Appendix S, Section IV, Part 51, Appendix W, 51.166, 52.21, Part 58, Appendix B, 60, 61, 63, 81.318, 81 Subpart D; 42 USC 7401 to 7671q (Clean Air Act), 4321 to 4370d (National Environmental Policy Act)
STATUTORY AUTHORITY: KRS 224.10-100; 40 CFR 51.166, 52.21, 42 USC 7401 to 7671q (Clean Air Act)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to prescribe regulations for the prevention, abatement and control of air pollution. This administrative regulation provides for the prevention of significant deterioration of ambient air quality. The provisions of this administrative regulation are not different nor more stringent than the federal regulation, 40 CFR 51.166.

Section 1. Definitions. Terms not defined in this section shall have the meaning given them in 401 KAR 51:001.

- (1) (a) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (b) to (d) of this subsection.

(b) Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during the two (2) year period which precedes the particular date and is representative of normal source operation. The cabinet may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(c) The cabinet may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(d) For an emissions unit (other than an electric utility steam generating unit) which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(e) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, if the source owner or operator maintains and submits to the cabinet on an annual basis for a period of five (5) years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten (10) years, may be required by the cabinet if it determines that period to be more representative of normal source post-change operations.
- (2) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area. This determination shall be made on a case-by-case basis and shall consider the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with the times of visitor use of the Class I area, and the frequency and timing of natural conditions

that reduce visibility.

- (3) "Allowable emissions" means the emissions rate of a stationary source which is calculated using the maximum rated capacity of the source (unless the source is subject to state or federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
- (a) The applicable standards in Title 401, KAR Chapters 57, 59, 60, and 63, or 40 CFR 60, 61, and 63;
 - (b) The applicable state or federally approved regulatory emissions limitation, including those with a future compliance date; or
 - (c) The emissions rate specified as a state or federally enforceable permit condition, including those with a future compliance date.
- (4) (a) "Baseline area" means an intrastate area (and every part of that area designated as attainment or unclassifiable pursuant to 42 USC 7404(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act), in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than one (1) $\mu\text{g}/\text{m}^3$ (annual average) of the pollutant for which the minor source baseline date is established. Area redesignations under 42 USC 7404(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act), cannot intersect or be smaller than the area of impact of a major stationary source or major modification which:
- 1. Establishes a minor source baseline date; or
 - 2. Is subject to this administrative regulation and would be constructed in the Commonwealth of Kentucky.
- (b) A baseline area established originally for total suspended particulate (TSP) increments shall remain in effect and shall apply in determining the amount of available PM_{10} increments, except that this baseline area shall not remain in effect if the cabinet rescinds the corresponding minor source baseline date in accordance with subsection (27)(b) of this section.
- (5) "Baseline concentration" means that ambient concentration level which exists in the baseline area when the applicable minor source baseline date is established. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
- (a) The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (c) of this subsection; and
 - (b) The allowable emissions of major stationary sources which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.
 - (c) The following shall not be included in the baseline concentration and shall affect the maximum applicable allowable increase:
 - 1. Actual emissions at a major source, which result from construction commencing after the major source baseline date; and
 - 2. Actual emissions increases and decreases at a stationary source occurring after the minor source baseline date.
- (6) (a) "Baseline date" means major source baseline date, defined in subsection (24) of this section, or minor source baseline date, defined in subsection (27) of this section.
- (b) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- 1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act) for the pollutant on the date of its complete application; and

2. For a major stationary source, the pollutant would be emitted in significant amounts, or, for a major modification, there would be a significant net emissions increase of the pollutant.
- (7) "Begin actual construction" means initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Those activities include, but are not limited to, installation of building supports and foundations, laying underground pipework, and construction of permanent storage structures. For a change in method of operations, this term refers to those on-site activities other than the preparatory activities which mark the initiation of the change.
- (8) "Best available control technology" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), which would be emitted from a proposed major stationary source or major modification which the cabinet, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for that source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of that pollutant. Application of best available control technology shall not result in emissions of a pollutant which would exceed the emissions allowed by an applicable standard under Title 401, KAR Chapters 57, 59, 60, and 63, or 40 CFR Parts 60, 61, and 63. If the Cabinet determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, or operational standard, or combination of design, equipment, work practice, or operational standard, may be prescribed instead to satisfy the requirement for the application of best available control technology. That standard shall, to the degree possible, establish the emissions reduction achievable by implementation of the design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.
- (9) "Building, structure, facility, or installation" means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of a vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two (2) digit code) as described in the Standard Industrial Classification Manual, 1987, which has been incorporated by reference in Section 21 of this administrative regulation.
- (10) "Clean coal technology" means a technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.
- (11) "Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy - Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or a similar project funded through appropriations for the U.S. EPA. The federal contribution for a qualifying project shall be at least twenty (20) percent of the total cost of the demonstration project.
- (12) "Commence," for construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or

permits and either has:

- (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
 - (b) Entered into agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- (13) "Complete" means, in reference to an application for a permit, that the application contains information necessary for processing the application. Designating an application complete for permit processing does not preclude the cabinet from requesting or accepting additional information.
- (14) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.
- (15) "Electric utility steam generating unit" means a steam electric generating unit that is constructed for the purpose of supplying more than one-third (1/3) of its potential electric output capacity and more than twenty-five (25) megawatt electrical output to a utility power distribution system for sale. Steam supplied to a steam distributing system for the purpose of providing steam to a steam-electric generator producing electric energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- (16) "Emissions unit" means a part of a stationary source which emits or would have the potential to emit a pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act).
- (17) "Federal land manager" means, for lands in the United States, the secretary of the department with authority over those lands.
- (18) "Federally enforceable" means all limitations and conditions which are enforceable by the U.S. EPA, including those requirements developed pursuant to 40 CFR 60, 61, and 63, requirements within an applicable State Implementation Plan (SIP) and any permit requirements established pursuant to 40 CFR 52.21, or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA-approved program incorporated into the SIP, which expressly requires adherence to a permit issued under the program.
- (19) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (20) "High terrain" means an area having an elevation of 900 feet or more above the base of the stack of a source.
- (21) "Innovative control technology" means a system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.
- (22) "Low terrain" means an area other than high terrain.
- (23) "Major modification" means a physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act).
- (a) A net emissions increase that is significant for volatile organic compounds

shall be significant for ozone.

- (b) A physical change or change in the method of operation shall not include:
1. Routine maintenance, repair and replacement;
 2. Use of alternative fuel or raw material by reason of an order or a natural gas curtailment plan in effect under a federal act;
 3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
 4. Use of an alternative fuel or raw material by a stationary source which:
 - a. The source was capable of accommodating before January 6, 1975, unless the change would be prohibited under a permit condition which was established after January 6, 1975; or
 - b. The source is approved to use under a permit issued under this administrative regulation or under 40 CFR 52.21;
 5. An increase in the hours of operation or in the production rate, unless the change would be prohibited after January 6, 1975, pursuant to 40 CFR 52.21; after June 6, 1979, pursuant to 401 KAR 51:015; after September 22, 1982, pursuant to this administrative regulation; or under 401 KAR 50:035 and 401 KAR 51:016E; or
 6. A change in ownership at a stationary source.
 7. The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the cabinet, concurring with U.S. EPA, determines that such addition, replacement, or use renders the unit less environmentally beneficial, unless:
 - a. The Cabinet has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of a criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of 42 USC 7401 to 7515 (Title I of the Clean Air Act), if any, and
 - b. The cabinet determines that the increase will cause or contribute to a violation of any national ambient air quality standard or Prevention of Significant Deterioration (PSD) increment or visibility limitation.
 8. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with the Kentucky SIP and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
 9. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit of a regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
 10. The reactivation of a very clean coal-fired electric utility steam generating unit.

(24) "Major source baseline date" means:

- (a) For particulate matter and sulfur dioxide, January 6, 1975; and
- (b) For nitrogen dioxide, February 8, 1988.

(25) (a) "Major stationary source" means:

1. Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of a pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act): fossil fuel-fired steam electric plants of more than 250 million BTU per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary

- copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combination of fossil fuel boilers) totaling more than 250 million BTU per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;
2. Notwithstanding the stationary source size specified in subparagraph 1. of this paragraph, a stationary source which emits, or has the potential to emit, 250 tons per year or more of an air pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act); or
 3. Any physical change that would occur at a stationary source not otherwise qualifying under this subsection as a major stationary source, if the change would constitute a major stationary source by itself.
- (b) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- (c) For this administrative regulation, the fugitive emissions of a stationary source shall not be included in determining if it is a major stationary source, unless the source belongs to one (1) of the following categories of stationary sources:
1. Coal cleaning plants (with thermal dryers);
 2. Kraft pulp mills;
 3. Portland cement plants;
 4. Primary zinc smelters;
 5. Iron and steel mills;
 6. Primary aluminum ore reduction plants;
 7. Primary copper smelters;
 8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
 9. Hydrofluoric, sulfuric, or nitric acid plants;
 10. Petroleum refineries;
 11. Lime plants;
 12. Phosphate rock processing plants;
 13. Coke oven batteries;
 14. Sulfur recovery plants;
 15. Carbon black plants (furnace process);
 16. Primary lead smelters;
 17. Fuel conversion plants;
 18. Sintering plants;
 19. Secondary metal production plants;
 20. Chemical process plants;
 21. Fossil-fuel boilers (or combination of fossil-fuel boilers) totaling more than 250 million BTUs per hour heat input;
 22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 23. Taconite ore processing plants;
 24. Glass fiber processing plants;
 25. Charcoal production plants;
 26. Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; and
 27. Any stationary source category which, as of August 7, 1980, is being regulated under Title 401, KAR Chapters 57, 59, 60, and 63; 40 CFR Parts 60, 61, and 63; or 42 USC 7411 or 7412 (Section 111 or 112 of the Clean Air Act).

- (26) "Mandatory Class I federal area" means an area identified in 40 CFR 81, Subpart D, where the administrator of the U.S. EPA, in consultation with the Secretary of the United States Department of Interior, has determined visibility to be an important value.
- (27) (a) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date shall be:
1. For particulate matter and sulfur dioxide, August 7, 1977, and
 2. For nitrogen dioxide, February 8, 1988.
- (b) A minor source baseline date established originally for the TSP increments shall remain in effect and shall apply in determining the amount of available PM₁₀ increments, except that the cabinet may rescind the minor source baseline date if it can be shown, to the satisfaction of the cabinet, that the emissions increase from the major modification responsible for triggering that date did not result in a significant amount of PM₁₀ emissions.
- (28) "Natural conditions" means those naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.
- (29) "Necessary preconstruction approvals or permits" means those permits or approvals required under the regulations of Title 401, KAR Chapters 50 to 65 and federal air quality control laws and regulations.
- (30) (a) "Net emissions increase" means the amount by which the sum of subparagraphs 1. and 2. of this paragraph exceeds zero:
1. An increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
 2. Other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
- (b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if:
1. For construction that commences prior to January 6, 2002, it occurs between the date ten (10) years before construction on the particular change commences, and the date that the increase from the particular change occurs.
 2. For construction that commences on and after January 6, 2002, it occurs between the date five (5) years before construction on the particular change commences, and the date that the increase from the particular change occurs.
- (c) An increase or decrease in actual emissions is creditable only if the cabinet or the U.S. EPA has not relied on it in issuing a permit for the source under this administrative regulation or 40 CFR 52.21, if the permit is in effect when the increase in actual emissions from the particular change occurs.
- (d) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date is creditable only if it is considered in calculating the amount of maximum allowable increases remaining available. For particulate matter, only PM₁₀ emissions shall be used to evaluate the net emissions increase for PM₁₀.
- (e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (f) A decrease in actual emissions is creditable only to the extent that:
1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
 2. It is state or federally enforceable from the time that actual

- construction on the particular change begins; and
3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. A replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (31) "Pollution control project" means an activity or project undertaken at an existing electric utility steam generating unit in order to reduce emissions from that unit. Such activities and projects are limited to:
- (a) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;
 - (b) An activity or project to accommodate switching to a fuel that is less polluting than the fuel used prior to the activity or project, including but not limited to natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions;
 - (c) A permanent clean coal technology demonstration project conducted under 42 USC 5903(d) (Title II, section 101(d), of the Further Continuing Appropriations Act of 1985) or subsequent appropriations, up to a total of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. Environmental Protection Agency, or
 - (d) A permanent clean coal technology demonstration project that constitutes a repowering project.
- (32) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. A physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions shall not count in determining the potential to emit of a stationary source.
- (33) "Reactivation of a very clean coal-fired electric utility steam generating unit" means a physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation if the unit:
- (a) Has not been in operation for the two (2) year period between November 15, 1988, and November 15, 1990, and the emissions from that unit continue to be carried in the Kentucky emissions inventory after November 15, 1990.
 - (b) Was equipped prior to shutdown with a continuous system of emissions control achieving a removal efficiency for sulfur dioxide of no less than eighty-five (85) percent and a removal efficiency for particulates of no less than ninety-eight (98) percent;
 - (c) Is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation; and
 - (d) Is otherwise in compliance with the requirements of 42 USC 7401 to 7671q (Clean Air Act).
- (34) (a) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells,

- or as determined by the Administrator of U.S. EPA in consultation with the Secretary of Energy, a derivative of one or more of these technologies, or another technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- (b) Repowering shall also include an oil or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991 by the Department of Energy.
 - (c) The cabinet shall give expedited consideration to a permit application from a source that satisfies the requirements of this subsection and is granted an extension under 42 USC 7651h (Section 409 of the Clean Air Act).
- (35) "Representative actual annual emissions" means the average rate , in tons per year, at which the source is projected to emit a pollutant for the two (2) year period after a physical change or change in the method of operation of a unit (or a different consecutive two (2) year period within ten (10) years after that change, if the cabinet determines that this period is more representative of normal source operations), considering the effect the change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the cabinet shall:
- (a) Consider all the relevant information, including but not limited to, historical operational data, the company's own representations, filings with local, state, or federal regulatory authorities, and compliance plans under 42 USC 7651 to 7651o (Title IV of the Clean Air Act); and
 - (b) Exclude, in calculating an increase in emissions that results from the particular physical change or change in method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.
- (36) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For this administrative regulation, secondary emissions shall be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from an offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions shall not include emissions which come from a mobile source, (e.g., the emissions from the tailpipe of a motor vehicle, from a train, or from a vessel).
- (37) "Significant" means:
- (a) In reference to a net emissions increase or the potential of a source to emit a pollutant listed in Section 22 of this administrative regulation, a rate of emissions that would equal or exceed a rate given in Section 22 of this administrative regulation.
 - (b) In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), that is not listed in Section 22 of this administrative regulation, any emissions rate.
 - (c) Notwithstanding paragraph (b) of this subsection and Section 22 of this administrative regulation, "significant" means an emissions rate or net emissions increase associated with a major stationary source or major modification which is to be constructed within ten (10) kilometers of a Class

I area and has an impact on that area equal to or greater than one (1) $\mu\text{g}/\text{m}^3$ (twenty-four (24) hour average).

- (38) "Stationary source" means a building, structure, facility, or installation which emits or may emit an air pollutant subject to regulation under the 42 USC 7401 to 7671q (Clean Air Act).
- (39) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five (5) years or less, and which complies with the Kentucky SIP and with other requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated.
- (40) "Visibility impairment" means a humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.

Section 2. Applicability. This administrative regulation shall apply to a major stationary source or a major modification which:

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Section 3. Ambient Air Increments. In areas designated as Class I or II, increases in pollutant concentration over the baseline concentration shall be limited to the levels specified in Section 23 of this administrative regulation. For a period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) such period per year at any one (1) location.

Section 4. Ambient Air Ceilings. No concentration of a pollutant specified in Section 2 of this administrative regulation shall exceed:

- (1) The concentration permitted under the national secondary ambient air quality standard; or
- (2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lower for the pollutant for a period of exposure.

Section 5. Area Classifications.

- (1) The following areas which were in existence on August 7, 1977, shall be Class I areas and shall not be redesignated:
 - (a) International parks;
 - (b) National wilderness areas and national memorial parks which exceed 5,000 acres in size; and
 - (c) National parks which exceed 6,000 acres in size.
- (2) Any other area, unless otherwise specified in the legislation creating the area, is designated Class II but may be redesignated as provided in 40 CFR 51.166(g).
- (3) The visibility protection requirements of this administrative regulation shall apply only to sources which may impact a mandatory Class I federal area.
- (4) The following areas may be redesignated only as Class I or II:
 - (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
 - (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

Section 6. Exclusions from Increment Consumption.

- (1) The cabinet may, after notice and opportunity for at least one (1) public hearing to be held in accordance with procedures established in 401 KAR 50:035, exclude the following concentrations in determining compliance with a maximum allowable increase:
 - (a) Concentrations attributable to the increase in emissions from stationary sources which have been converted from the use of petroleum products, natural gas, or both by reason of an order in effect under a federal statute or regulation over the emissions from the sources before the effective date of the order;
 - (b) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the federal statute over the emissions from those sources before the effective date of the plan;
 - (c) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources; and
 - (d) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources which are affected by SIP revisions approved by the Administrator of the U.S. EPA as meeting the criteria specified in subsection (4) of this section.
- (2) Exclusion of concentrations shall not apply more than five (5) years after the effective date of the order to which subsection (1)(a) of this section refers or the plan to which subsection (1)(b) of this section refers, whichever is applicable. If both an order and plan are applicable, no exclusion shall apply more than five (5) years after the later of the two (2) effective dates.
- (3) For excluding concentrations pursuant to subsection (1)(d) of this section, the SIP revision shall specify the following provisions:
 - (a) The time over which the temporary emissions increase of sulfur dioxide, particulate matter, or nitrogen oxides would occur. The time period shall not exceed two (2) years in duration unless a longer time is approved by the U.S. EPA;
 - (b) The time period for excluding certain contributions in accordance with paragraph (a) of this subsection is not renewable;
 - (c) No emissions increase will occur from a stationary source which would:
 1. Impact a Class I area or an area where an applicable increment is known to be violated; or
 2. Cause or contribute to the violation of a national ambient air quality standard; and
 - (d) Limitations shall be in effect at the end of the time period established in paragraph (a) of this subsection which ensure that the emissions levels from stationary sources affected by the SIP revision will not exceed those levels occurring from those sources before the revision was approved.

Section 7. Stack Heights.

- (1) The degree of emission limitation required for control of an air pollutant under this administrative regulation shall not be affected by:
 - (a) So much of the stack height of a source as exceeds good engineering practice; or
 - (b) Another dispersion technique.
- (2) Subsection (1) of this section shall not apply to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

Section 8. Review of Major Stationary Sources and Major Modifications; Source Applicability and Exemptions.

- (1) A major stationary source or major modifications to which Sections 9 to 17 of this administrative regulation apply shall not begin actual construction until it obtains a permit stating that the stationary source or modification shall comply with Sections 9 to 17 of this administrative regulation.

- (2) Sections 9 to 17 of this administrative regulation shall apply to a major stationary source and major modification for each pollutant that it would emit which is subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), except as required in Section 2 of this administrative regulation.
- (3) Sections 9 to 17 of this administrative regulation shall apply only to a major stationary source or major modification that will be constructed in an area designated as attainment or unclassifiable pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act).
- (4) Sections 9 to 17 of this administrative regulation shall not apply to a particular major stationary source or major modification if:
 - (a) The owner or operator:
 - 1. Obtained the necessary federal, state, and local preconstruction approvals effective before September 22, 1982;
 - 2. Commenced construction before September 22, 1982; and
 - 3. Did not discontinue construction for a period of eighteen (18) months or more; or
 - (b) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at the institution, and the Governor of the Commonwealth of Kentucky requests that it be exempt from those requirements;
 - (c) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:
 - 1. Coal cleaning plants (with thermal dryers);
 - 2. Kraft pulp mills;
 - 3. Portland cement plants;
 - 4. Primary zinc smelters;
 - 5. Iron and steel mills;
 - 6. Primary aluminum ore reduction plants;
 - 7. Primary copper smelters;
 - 8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - 9. Hydrofluoric, sulfuric, or nitric acid plants;
 - 10. Petroleum refineries;
 - 11. Lime plants;
 - 12. Phosphate rock processing plants;
 - 13. Coke oven batteries;
 - 14. Sulfur recovery plants;
 - 15. Carbon black plants (furnace process);
 - 16. Primary lead smelters;
 - 17. Fuel conversion plants;
 - 18. Sintering plants;
 - 19. Secondary metal production plants;
 - 20. Chemical process plants;
 - 21. Fossil-fuel boilers (or combination of fossil-fuel boilers) totaling more than 250 million BTUs per hour heat input;
 - 22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - 23. Taconite ore processing plants;
 - 24. Glass fiber processing plants;
 - 25. Charcoal production plants;
 - 26. Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or
 - 27. Another stationary source category which, as of August 7, 1980, is being regulated under 42 USC 7411 or 7412 (Section 111 or 112 of the Clean Air Act); or
 - (d) The source or modification is a portable stationary source which has

- previously received a permit under this administrative regulation; and:
1. The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary;
 2. The emissions from the source would not exceed its allowable emissions;
 3. The emissions from the source would not impact a Class I area or an area where an applicable increment is known to be violated; and
 4. Reasonable notice is given to the cabinet prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet.
- (e) The source or modification was not subject to this administrative regulation with respect to particulate matter requirements in effect before July 31, 1987, and the owner or operator:
1. Obtained all final federal, state, and local preconstruction approvals or permits necessary under the applicable SIP before July 31, 1987;
 2. Commenced construction within eighteen (18) months after July 31, 1987; and
 3. Did not discontinue construction for a period of eighteen (18) months or more and completed construction within a reasonable period of time.
- (f) The source or modification was subject to this administrative regulation with respect to particulate matter requirements, as in effect before July 31, 1987, and the owner or operator submitted an application for a permit under this administrative regulation before that date, and the cabinet subsequently determined that the application as submitted was complete with respect to the particulate matter requirements then in effect in this administrative regulation. If not, the requirements of Sections 9 to 17 of this administrative regulation that were in effect before July 31, 1987, shall apply to the source or modification.
- (5) Sections 9 to 17 of this administrative regulation shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, for that pollutant, the source or modification is located in an area designated as non-attainment pursuant to 42 USC 7407(d)(1)(A)(i) (Section 107(d)(1)(A)(i) of the Clean Air Act).
- (6) Sections 10, 12 and 14 of this administrative regulation shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modifications:
- (a) Will not impact a Class I area or an area where an applicable increment is known to be violated; and
 - (b) Will be temporary.
- (7) Sections 10, 12 and 14 of this administrative regulation as they apply to a maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), from the modification after the application of best available control technology will be less than fifty (50) tons per year.
- (8) The cabinet may exempt a stationary source or modification from the monitoring requirements of Section 12 of this administrative regulation for a particular pollutant if:
- (a) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification will cause air quality impacts in an area which are less than the amounts given in Section 24 of this administrative regulation; or
 - (b) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in Section 24 of this administrative regulation, or the pollutant is not listed in Section 24 of this administrative regulation.
- (9) (a) At the discretion of the cabinet, the requirements for air quality monitoring

of PM₁₀ in Section 12 of this administrative regulation may not apply to a particular source or modification if the owner or operator of the source or modification submitted an application for a permit under this section on or before June 1, 1988, and the cabinet subsequently determines that the application as submitted before that date was complete, except for the requirements for monitoring particulate matter specified in Section 12 of this administrative regulation.

- (b) The requirements for air quality monitoring of PM₁₀ in Section 12 of this administrative regulation shall apply to a particular source or modification if the owner or operator of the source or modification submitted an application for a permit under 40 CFR 52.21 or this administrative regulation after June 1, 1988, and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988, to the date the application becomes complete in accordance with Section 12 of this administrative regulation, unless the cabinet determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four (4) months), the data that Section 12 of this administrative regulation requires shall have been gathered over that shorter period.
- (10) The requirements of Section 10(2) of this administrative regulation shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM₁₀ if the owner or operator of the source or modification submitted an application for a permit under 40 CFR 52.21 or this administrative regulation before the date the provisions embodying the maximum allowable increases for PM₁₀ took effect, and the cabinet subsequently determined that the application as submitted before that date was complete. Instead, the requirements of Section 10(2) shall apply for the maximum allowable increases for TSP as in effect on the day the application was submitted.
- (11) The requirements of Section 10(2) of this administrative regulation shall not apply to a stationary source or modification with respect to a maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under 40 CFR 52.21 or this administrative regulation before the date on which the provisions embodying the maximum allowable increase took effect, and the cabinet subsequently determined that the application as submitted before that date was complete.

Section 9. Control Technology Review.

- (1) A major stationary source or major modification shall meet each applicable emissions limitation under Title 401, KAR Chapters 50 to 65, and each applicable emission standard and standard of performance under 40 CFR 60, 61, and 63.
- (2) A new major stationary source shall apply best available control technology for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), that it will have the potential to emit in significant amounts.
- (3) A major modification shall apply best available control technology for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), for which it will result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant will occur as a result of a physical change or change in the method of operation of the unit.
- (4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than eighteen (18) months prior to commencement of construction of each independent phase of the project. The owner or operator of the applicable stationary source may then be required to demonstrate the adequacy of a previous determination of best available control technology for the source.

Section 10. Source Impact Analysis. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or

reductions (including secondary emissions), will not cause or contribute to air pollution in violation of:

- (1) A national ambient air quality standard in an air quality control region; or
- (2) An applicable maximum allowable increase over the baseline concentration in an area.

Section 11. Air Quality Models.

- (1) Estimates of ambient concentrations shall be based on the applicable air quality models, data bases, and other requirements specified in 40 CFR Part 51, Appendix W ("Guideline on Air Quality Models (Revised)" (1986), Supplement A (1987), Supplement B (1993), and Supplement C (1996)), incorporated by reference in Section 21 of this administrative regulation.
- (2) If an air quality model specified in 40 CFR Part 51, Appendix W, is inappropriate, the model may be modified or another model substituted. This change shall be subject to notice and opportunity for public comment under Section 16 of this administrative regulation. Written approval of the U.S. EPA shall be obtained for a modification or substitution. Methods similar to those outlined in the "Workbook for the Comparison of Air Quality Models," specified in 401 KAR 50:040, Section 1(3), shall be used to determine the comparability of air quality models.

Section 12. Air Quality Analysis.

- (1) Preapplication analysis.
 - (a) An application for a permit under this administrative regulation shall contain an analysis of ambient air quality in the area that the major stationary source or major modification will affect for each of the following pollutants:
 1. For a source, each pollutant that it will have the potential to emit in a significant amount as defined in Section 1(37) of this administrative regulation;
 2. For a modification, each pollutant for which it will result in a significant net emissions increase.
 - (b) With respect to a pollutant for which no national ambient air quality standard exists, the analysis shall contain the air quality monitoring data the cabinet determines necessary to assess ambient air quality for that pollutant in an area that the emissions of that pollutant will affect.
 - (c) For pollutants (other than nonmethane hydrocarbons) for which a standard does exist, the analysis shall contain continuous air quality monitoring data gathered to determine if emissions of that pollutant will cause or contribute to a violation of the standard or a maximum allowable increase.
 - (d) The required continuous air quality monitoring data shall have been gathered over a period of at least one (1) year and shall represent at least the year preceding receipt of the application, except that, if the cabinet determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one (1) year, but not less than four (4) months (e.g. with data obtained during a time period when maximum air quality levels can be expected), the required data shall have been gathered over at least that shorter period.
 - (e) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR Part 51, Appendix S, section IV, may provide post-approval monitoring data for ozone in lieu of providing preconstruction data required under paragraphs (a) to (d) of this subsection.
 - (f) For an application that is complete, except for the requirements of paragraphs (c) and (d) of this subsection pertaining to PM₁₀, after December 1, 1988, and no later than August 1, 1989, the data that paragraph (c) of this subsection requires shall have been gathered over at least the period from August 1, 1988, to the date the application becomes otherwise complete, unless the cabinet determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than

- four (4) months), the data that paragraph (c) of this subsection requires shall have been gathered over that shorter period.
- (g) For air quality monitoring of PM₁₀ under Section 8(9) (a) and (b) of this administrative regulation, the owner or operator of the source or modification shall use a monitoring method approved by the cabinet and shall estimate the ambient concentrations of PM₁₀ using the data collected by that approved monitoring method in accordance with estimating procedures approved by the cabinet.
 - (2) Post-construction monitoring. The owner or operator of a major stationary source or major modification, after construction of the stationary source or modification, shall conduct the ambient monitoring which the cabinet determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in an area.
 - (3) Operation of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of 40 CFR Part 58, Appendix B, which is incorporated by reference in Section 21 of this administrative regulation, during the operation of monitoring stations to satisfy subsections (1) and (2) of this section.

Section 13. Source Information. The owner or operator of a proposed source or modification shall submit all information necessary to perform an analysis or make a determination required under this administrative regulation.

- (1) For a major source or major modification to which Sections 9, 11, 13 and 15 of this administrative regulation apply, the information shall include:
 - (a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;
 - (b) A detailed schedule for construction of the source or modification;
 - (c) A detailed description of the system of continuous emission reduction planned for the source or modification, emission estimates, and other information necessary to determine that best available control technology will be applied.
- (2) Upon request of the cabinet, the owner or operator shall also provide information on:
 - (a) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate the impact; and
 - (b) The air quality impacts and the nature and extent of general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification will affect.

Section 14. Additional Impact Analysis.

- (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator is not required to provide an analysis of the impact on vegetation having no significant commercial or recreational value.
- (2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.
- (3) Visibility monitoring. The cabinet may require monitoring of visibility in a Class I area impacted by the proposed new stationary source or major modification using human observations, teleradiometers, photographic cameras, nephelometers, fine particulate monitors, or other appropriate methods as specified by the U.S. EPA. The method selected shall be determined on a case-by-case basis by the cabinet. Visibility monitoring required by the cabinet in a Class I area shall be approved by the federal land manager. Data obtained from visibility monitoring shall be made available to the cabinet, U.S. EPA, and the federal land manager, upon request.

Section 15. Sources Impacting Class I Areas; Additional Requirements.

- (1) Notice to U.S. EPA and federal land managers. The cabinet shall provide written notice to the U.S. EPA, the federal land manager, and the federal official charged with direct responsibility for management of lands within a Class I area of a permit application for a proposed major stationary source or major modification the emissions from which may affect the Class I area. The cabinet shall provide notice promptly after receiving the application. The notice shall include a copy of all information relevant to the permit application and shall be given within thirty (30) days of receipt, and at least sixty (60) days prior to the public hearing on the application for a permit to construct. The notice shall include an analysis of the proposed source's anticipated impacts on visibility in the Class I area. The cabinet shall also provide the federal land manager and other federal officials with a copy of the preliminary determination required under Section 16 of this administrative regulation, and shall make available to them the materials used in making that determination, promptly after the cabinet makes it. The cabinet shall also notify all affected federal land managers within thirty (30) days of receipt of an advance notification of the permit application.
- (2) Federal land manager. The federal land manager and the federal official charged with direct responsibility for management of lands located in a Class I area have an affirmative responsibility to protect the air quality related values (including visibility) of the lands, and to consider, in consultation with the cabinet, whether a proposed source or modification will have an adverse impact on those values.
- (3) Visibility analysis. The cabinet shall consider an analysis performed by the federal land manager, provided within thirty (30) days of the notice and analysis required by subsection (1) of this section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in a Class I area. If the cabinet finds that an analysis does not demonstrate to the satisfaction of the cabinet that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public notice required in 401 KAR 50:035, either explain that decision or give notice as to where the explanation can be obtained.
- (4) Denial; impact on air quality related values. The federal land manager of lands located in a Class I area may demonstrate to the cabinet that the emissions from a proposed source or modification will have an adverse impact on the air quality related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from the proposed source or modification will not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area as defined in Section 23 of this administrative regulation. If the cabinet concurs with the demonstration then the cabinet shall not issue the permit.
- (5) Class I variances. The owner or operator of a proposed source or modification may demonstrate to the federal land manager that the emissions from the source or modification will have no adverse impact on the air quality related values of lands located in a Class I area (including visibility), notwithstanding that the change in air quality resulting from emissions from the source or modification will cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with the demonstration and he so certifies, the cabinet may, if the other applicable requirements of this administrative regulation are met, issue the permit with the emission limitations that are necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides will not exceed the maximum allowable increases over minor source baseline concentration for the pollutants specified in Section 25 of this administrative regulation.
- (6) Sulfur dioxide variance by governor with federal land manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under subsection (5) of this section because the source cannot be constructed without exceeding a maximum allowable increase in sulfur dioxide applicable to a Class I area for a period of twenty-four (24) hours or less, may demonstrate to the

Governor of the Commonwealth of Kentucky that a variance under this clause will not adversely affect the air quality related values of the area (including visibility). The governor, after consideration of the federal land manager's recommendation (if applicable) and subject to his concurrence, may, after notice and public hearing, grant a variance from the maximum allowable increase. If a variance is granted, the cabinet shall issue a permit to the source or modification under the requirements of subsection (8) of this section, if the other applicable requirements of this administrative regulation are met.

- (7) Variance by the governor with the President's concurrence. If the Governor of the Commonwealth of Kentucky recommends a variance in which the federal land manager does not concur, the recommendations of the governor and the federal land manager shall be transmitted to the President of the United States of America. If the variance is approved by the President, the cabinet shall issue a permit pursuant to the requirements of subsection (8) of this section, if the other applicable requirements of this administrative regulation are met.
- (8) Emission limitations for presidential or gubernatorial variance. For a permit issued pursuant to subsections (6) or (7) of this section the source or modification shall comply with those emission limitations necessary to assure that emissions of sulfur dioxide from the source or modification will not (during a day on which the other applicable maximum allowable increases are exceeded) cause or contribute to concentrations which will exceed the maximum allowable increases over the baseline concentration as specified in Section 26 of this administrative regulation and to assure that the emissions will not cause or contribute to concentrations which exceed the other applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than a total of eighteen (18) days, not necessarily consecutive, during an annual period.

Section 16. Public Participation. The cabinet shall follow the applicable procedures of 401 KAR 50:035 and 40 CFR 51.166(q) in processing applications under this administrative regulation.

Section 17. Source Obligation.

- (1) An owner or operator who constructs or operates a source or modification not in accordance with the application submitted to the cabinet under this administrative regulation or under the terms of an approval to construct; or an owner or operator of a source or modification subject to this administrative regulation who begins actual construction after September 22, 1982, without applying for and receiving approval, shall be subject to appropriate enforcement action.
- (2) Approval to construct shall become invalid if construction is not commenced within eighteen (18) months after receipt of the approval, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The cabinet may extend the eighteen (18) month period upon a satisfactory showing that an extension is justified. This provision shall not apply to the time period between construction of the approved phases of a phased construction project; each phase shall commence construction within eighteen (18) months of the projected and approved commencement date.
- (3) Approval to construct shall not relieve an owner or operator of the responsibility to comply fully with Title 401, KAR Chapters 50 to 63, and other requirements of local, state, or federal law.
- (4) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in an enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then Sections 9 to 18 of this administrative regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Section 18. Environmental Impact Statements. If a proposed source or modification is subject to action by a federal agency which might necessitate preparation of an environmental impact statement pursuant to 42 USC 4321 to 4370d (the National

Environmental Policy Act), review by the cabinet conducted pursuant to this administrative regulation shall be coordinated with the broad environmental reviews under that Act and under 42 USC 7609 (Section 309 of the Clean Air Act), to the maximum extent feasible and reasonable.

Section 19. Innovative Control Technology.

- (1) An owner or operator of a proposed major stationary source or major modification may request the cabinet in writing to approve a system of innovative control technology.
- (2) The cabinet shall, with the consent of the governors of other affected states, determine that the source or modification may employ a system of innovative control technology if:
 - (a) The proposed control system will not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
 - (b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Section 9(2) of this administrative regulation by a date specified by the cabinet. The date shall not be later than four (4) years from the time of startup or seven (7) years from permit issuance;
 - (c) The source or modification will meet Sections 9 and 10 of this administrative regulation based on the emissions rate that the stationary source employing the system of innovative control technology will be required to meet on the date specified by the cabinet;
 - (d) The source or modification will not before the date specified by the cabinet:
 1. Cause or contribute to a violation of an applicable national ambient air quality standard; or
 2. Impact an area where an applicable increment is known to be violated;
 - (e) Section 15 of this administrative regulation (relating to Class I areas) has been satisfied for all periods during the life of the source or modification; and
 - (f) All other applicable requirements including those for public participation have been met.
- (3) The cabinet shall withdraw approval to employ a system of innovative control technology if:
 - (a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;
 - (b) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
 - (c) The cabinet decides that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- (4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with subsection (3) of this section, the cabinet may allow the source or modification up to an additional three (3) years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

Section 20. Permit Condition Rescission.

- (1)
 - (a) An owner or operator holding a permit for a stationary source or modification which contains conditions pursuant to 401 KAR 51:015 or 401 KAR 51:016E may request that the cabinet rescind the applicable conditions.
 - (b) An owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under this administrative regulation as in effect on July 30, 1987, or an earlier version of this administrative regulation, may request that the cabinet rescind the permit or a particular portion of the permit.
- (2) The cabinet shall rescind a permit condition if requested and if the applicant can demonstrate to the satisfaction of the cabinet that this administrative regulation

does not apply to the source or modification or to a portion of the source or modification.

Section 21. Reference Material.

- (1) Incorporation by reference. The following documents are incorporated by reference:
 - (a)
 1. *Standard Industrial Classification Manual* 1987, published by the Office of Management and Budget.
 2. The manual is available under Order No. PB 87-100012 from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia, 22161; Phone (703) 487-4650.
 - (b)
 1. Documents from the *Code of Federal Regulations*,
 - a. 40 CFR Part 51, Appendix W: Guideline on Air Quality Models (Revised), (July, 1986), with Supplement A (July, 1987), Supplement B (July, 1993), and Supplement C (August, 1995), as published in the *Code of Federal Regulations*, July 1, 1995, and as amended by 60 FR 40465 (August 9, 1995).
 - b. 40 CFR Part 58, Appendix B: Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring, as published in the *Code of Federal Regulations*, July 1, 1995, and as amended by 60 FR 52315 (October 6, 1995).
 2. Copies of the *Code of Federal Regulations* and the *Federal Register* may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Attn.: New Orders, P.O. Box 371954, Pittsburgh PA 15250-7954; Phone (202) 512-1800; FAX (202) 512-2250.
- (2) The documents incorporated by reference in subsection (1) of this section are available for public inspection and copying (subject to copyright law) at the following main and regional offices of the Kentucky Division for Air Quality during the normal working hours of 8:00 a.m. to 4:30 p.m., local time.
 - (a) Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601-1403, (502) 573-3382;
 - (b) Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky 41105-1507, , (606) 920-2067;
 - (c) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky 42104, (502) 746-7475;
 - (d) Florence Regional Office, 7964 Kentucky Drive, Suite 8, Florence, Kentucky 41042, (606) 292-6411;
 - (e) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701, (606) 435-6022;
 - (f) London Regional Office, 85 State Police Road, London, Kentucky, 40741, (606) 878-0157;
 - (g) Owensboro Regional Office, 3032 Alvey Park Drive W., Suite 700, Owensboro, Kentucky 42303, (502) 687-7304; and
 - (h) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky 42003, (502) 898-8468.

Section 22. Significant Net Emissions Rates

POLLUTANT	EMISSIONS RATE (tons per year)
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy of particulate matter emissions 15 tpy of PM ₁₀ emissions
Ozone	40 tpy of volatile organic compounds
Lead	0.6 tpy
Asbestos	0.007 tpy
Beryllium	0.0004 tpy
Mercury	0.1 tpy
Vinyl chloride	1 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy
Reduced sulfur compounds (including H ₂ S)	10 tpy
Municipal waste-combustor organics	3.2 x 10 ⁻⁶ megagrams per year (Mg/y) (measured as total tetra- through (3.5 x 10 ⁻⁶ tpy) octa-chlorinated dibenzo-p-dioxins and dibenzofurans)
Municipal waste combustor metals	14 Mg/y (15 tpy) (measured as particulate matter)
Municipal waste combustor acid gases	36 Mg/y (40 tpy) (measured as sulfur dioxide and hydrogen chloride)
Municipal solid waste landfill emissions	

45 Mg/y (50 tpy)

(measured as nonmethane organic compounds)

Section 23. Ambient Air Increments

POLLUTANT	Maximum Allowable Increase (Micrograms per cubic meter)
Class I	
Particulate Matter:	
PM ₁₀ , annual arithmetic mean	4
PM ₁₀ , 24-hour maximum	8
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide:	
Annual arithmetic mean	2.5
Class II	
Particulate Matter:	
PM ₁₀ , annual arithmetic mean	17
PM ₁₀ , 24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25

Section 24. Significant Air Quality Impact

POLLUTANT	AIR QUALITY LEVEL	AVERAGING TIME
Carbon monoxide	575 µg/m ³	8-hour average

Nitrogen dioxide	14 µg/m ³	annual average
Particulate matter	10 µg/m ³ of PM ₁₀	24-hour average
Sulfur dioxide	13 µg/m ³	24-hour average
Ozone	No de minimis air quality level is provided for ozone. However, a net increase of 100 tons per year or more of volatile organic compounds subject to this administrative regulation is required to perform an ambient impact analysis including the gathering of ambient air quality data.	
Lead	0.1 µg/m ³	3-month average
Mercury	0.25 µg/m ³	24-hour average
Beryllium	0.001 µg/m ³	24-hour average
Fluorides	0.25 µg/m ³	24-hour average
Vinyl chloride	15 µg/m ³	24-hour average
Hydrogen sulfide	0.2 µg/m ³	1-hour average
Total reduced sulfur	10 µg/m ³	1-hour average
Reduced sulfur compounds	10 µg/m ³	1-hour average

Section 25. Ambient Air Increments for Class I Variances

POLLUTANT	Maximum Allowable Increase (micrograms per cubic meter)
Particulate Matter:	
PM ₁₀ , annual arithmetic mean	17
PM ₁₀ , 24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
Nitrogen Dioxide:	
Annual arithmetic mean	25

Section 26. Ambient Air Increments for Presidential or Gubernatorial SO₂ Variances Maximum Allowable Increase

(Micrograms per cubic meter)
Terrain areas

Period of Exposure	<u>Low</u>	<u>High</u>
24-hour maximum	36	62
3-hour maximum	130	221

Effective Date: March 12, 1997

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg	FEB 20, 1986	SEP 01, 1989	54 FR 36307
1st Revision	DEC 29, 1986	NOV 28, 1989	54 FR 48887
2nd Revision	FEB 09, 1988	NOV 06, 1989	54 FR 46612
3rd Revision	JUL 07, 1988	FEB 07, 1990	55 FR 4169
4th Revision	OCT 20, 1992	JUN 23, 1994	59 FR 32343
5th Revision	MAR 21, 1997	JUL 24, 1998	63 FR 39741

401 KAR 51:052. Review of new sources in or impacting upon nonattainment areas.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division for Air Quality

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120; 42 USC 7401-7626; 42 USC 7407(d)(1)(A)(i), (ii), and (iii); 42 USC 7410; 40 CFR Part 51, Subpart 1; 40 CFR 51.165; 40 CFR 51.166(g); 40 CFR 52.21; 40 CFR 52.21(r); 40 CFR Part 60; 40 CFR Na 61; 40 CFR 81, Subpart D; 40 CFR 81.318, June 28, 1989 Federal Register (54 FR 27274)
STATUTORY AUTHORITY: KRS 224.10-100

NECESSITY AND FUNCTION: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. 42 USC 7410 likewise requires the state to implement standards for national primary and secondary ambient air quality. This administrative regulation establishes requirements for the construction or modification of stationary sources within, or impacting upon, areas where the national ambient air quality standards have not been attained.

Section 1. Definitions. As used in this administrative regulation, terms not defined shall have the meaning given them in 401 KAR 51:001 or, for terms relating to the protection of visibility, in 401 KAR 51:017.

- (1) "Actual emissions" means the actual rate of emissions of a pollutant from an emission unit, as determined in accordance with paragraphs (a) to (c) of this subsection.
 - (a) Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emission unit actually emitted the pollutant during a two (2) year period which precedes the particular date and which is representative of normal source operation. The cabinet shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the emission unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
 - (b) The cabinet may presume that source specific allowable emissions for the emission unit are equivalent to the actual emissions of the emission unit.
 - (c) For an emission unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emission unit on that date.
- (2) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area.
- (3) "Allowable emissions" means the emissions rate calculated using the maximum rated capacity of the source (unless the source is subject to state and federally enforceable permit conditions which limit operating rate, or hours of operation, or both) and the most stringent of the following:
 - (a) The applicable new source performance standards set forth in Title 401, Chapters 57 and 59, or 40 CFR Parts 60 and 61;
 - (b) Any other state and federally approved regulatory emission limitations, including those with a future compliance date; or
 - (c) The emission rate specified as a state and federally enforceable permit

condition, including those with a future compliance date.

- (4) "Begin actual construction" means initiation of physical on-site construction activities on an emission unit which are of a permanent nature. Activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.
- (5) "Building, structure, facility, or installation," means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons, under common control), except the activities of a vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., they have the same two (2) digit code) as described in the Standard Industrial Classification Manual, 1987, as incorporated by reference in Section 21 of 401 KAR 51:017.
- (6) "Classification date" means September 22, 1982.
- (7) "Commence," as applied to construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or permits and has either:
 - (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
 - (b) Entered into agreements or contractual obligations which cannot be canceled or modified without substantial loss to the owner or operator to undertake a program of construction of the source to be completed within a reasonable time.
- (8) "Construction" means a physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emission unit, which would result in a change in actual emissions.
- (9) "Emission unit" means a part of a stationary source which emits or would have the potential to emit a pollutant subject to regulation under 42 USC 7401-7626.
- (10) "Federal land manager" means, with respect to lands in the United States, the secretary of the department with authority over those lands.
- (11) "Federally enforceable" means all limitations and conditions which are enforceable by the U.S. Environmental Protection Agency (U.S. EPA), including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within an applicable State Implementation Plan, and a permit requirement established pursuant to 40 CFR 52.21, or under regulations approved pursuant to 40 CFR Part 51, Subpart 1, including operating permits issued under a U.S. EPA - approved program incorporated into the State Implementation Plan, which expressly requires adherence to a permit issued under the program.
- (12) "Fugitive Emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (13) "Lowest achievable emissions rate" means, for a source, the more stringent rate of emissions based on the following:
 - (a) The most stringent emissions limitation contained in an implementation plan of a state for the class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates d= the

limitation is not achievable; or

- (b) The most stringent emissions limitation achieved in practice by the class or category of stationary source. This limitation, when applied to a major modification, means the lowest achievable emissions rate for the new or modified emission unit within the stationary source. The application of this term shall not permit a proposed new or modified stationary source to emit a pollutant in excess of the amount allowable under an applicable standard under Title 401, Chapters 57 and 59, and 40 CFR Parts 60 and 61.
- (14) "Major modification" means a physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of a pollutant subject to regulation under 42 USC 7401-7626.
- (a) A net emissions increase that is significant for volatile organic compounds shall be significant for ozone.
 - (b) A physical change or change in the method of operation shall not include:
 - 1. Routine maintenance, repair, and replacement;
 - 2. Use of alternative fuel or raw material by reason of an order or by reason of a natural gas curtailment plan in effect under a federal act;
 - 3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
 - 4. Use of an alternative fuel or raw material by a stationary source that:
 - a. The source was capable of accommodating before December 21, 1976, unless the change would be prohibited under a permit condition established after December 21, 1976, pursuant to 40 CFR 52.21 or pursuant to 401 KAR 51:017 or under regulations established pursuant to 40 CFR 51.165; or
 - b. The source is approved to use under a permit issued under this administrative regulation;
 - 5. An increase in hours of operation or in production rate, unless the change is prohibited under a permit condition that was established after December 21, 1976, pursuant to 40 CFR 52.21 or pursuant to 401 KAR 51:017 or under regulations established pursuant to 40 CFR 51.165; or
 - 6. A change in ownership at a stationary source.
- (15) "Major stationary source" means:
- (a) Except as provided in paragraph (b) of this subsection, a stationary source that emits, or has the potential to emit, 100 tons per year or more of a pollutant subject to regulation under 42 USC 7401-7626.
 - (b) For ozone nonattainment areas, a stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit the following:
 - 1. For areas classified as serious, fifty (50) tons per year or more of volatile organic compounds (VOCs) or nitrogen oxides (NO_x);
 - 2. For areas classified as severe, twenty-five (25) tons per year or more of VOCs or NO_x;

3. For areas classified as extreme, ten (10) tons per year or more of VOCs or NO_x.
- (c) A physical change that would occur at a stationary source not qualifying under paragraph (a) or (b) of this subsection as a major stationary source, if the change would constitute a major stationary source by itself.
- (d) A source that is major for VOCs shall be considered major for ozone.
- (16) "Mandatory Class I federal area" means an area identified in 40 CFR 81, Subpart D, where the Administrator of the U.S. EPA, in consultation with the Secretary of the United States Department of the Interior, has determined visibility to be an important value.
- (17) "Natural conditions" means naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.
- (18) "Necessary preconstruction approvals or permits" means the permits or approvals required under the regulations of Title 401, Chapters 50 to 63.
- (19) "Net emissions increase" means the amount by which the sum of paragraphs (a) and (b) of this subsection exceeds zero:
- (a) An increase in actual emissions from a particular physical change or changes in method of operation at a stationary source; and
- (b) Another increase or decrease in actual emissions at the source that is contemporaneous with the particular change and is otherwise creditable.
- (c) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date which is ten (10) years before construction on the particular change commences, but not before December 21, 1976, and the date that the increase from the particular change occurs.
- (d) An increase or decrease in actual emissions shall be creditable only if the cabinet has not relied on it in issuing a permit for the source under this administrative regulation, which permit is in effect when the increase in actual emissions from the particular change occurs.
- (e) An increase in actual emissions shall be creditable only to the extent that the new level of actual emissions exceeds the old level.
- (f) A decrease in actual emissions shall be creditable only to the extent that:
1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
 2. It is state and federally enforceable at and after the time that actual construction on the particular change begins;
 3. The cabinet has not relied on it in issuing a permit or in demonstrating attainment or reasonable further progress; and
 4. It has the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

- (g) An increase that results from a physical change at a source occurs when the emission unit on which construction occurred becomes operational and begins to emit a particular pollutant. A replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (20) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. A physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state and federally enforceable. Secondary emissions shall not be counted in determining the potential to emit of a stationary source.
- (21) "Reasonable further progress" means annual incremental reductions in emissions of the applicable air pollutant which are sufficient, in the judgment of the cabinet and the U.S. EPA, to provide for attainment of the applicable ambient air quality standard by the date specified in 401 KAR 51:010, Section 2.
- (22) "Secondary emissions" means emissions which would occur as a result of the ,construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For this administrative regulation, secondary emissions shall be specific, well defined, and quantifiable, and shall impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from an offsite support facility that would otherwise not be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification. Secondary emissions shall not include emissions which come from a mobile source, e.g., the emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.
- (23) "Significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant, a rate of emissions that would equal or exceed rates given in Section 12 of this administrative regulation.
- (24) "State Implementation Plan" means the most recently prepared plan or revision required by 42 USC 7410 which has been submitted by the cabinet and approved by the U.S. EPA.
- (25) "Stationary source" means a building, structure, facility, or installation that emits or may emit an air pollutant subject to regulation under 42 USC 7401-7626.
- (26) "Visibility impairment" means a humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.

Section 2. Applicability.

- (1) This administrative regulation shall apply to new major sources or major modifications commenced after the classification date defined in Section 1(6) of this administrative regulation and that will locate in or impact upon an area designated as nonattainment pursuant to 42 USC 7407(d)(1)(A)(i). Area designations are contained in 40 CFR 81.318.
- (2) The provisions of this administrative regulation relating to visibility protection shall also apply to major sources or major modifications in

nonattainment areas which potentially have an impact on visibility in a mandatory Class I federal area.

Section 3. Initial Screening Analyses and Determination of Applicable Requirements.

- (1) Review of all sources for emissions limitation compliance. The cabinet shall examine each proposed major new source and proposed major modification to determine if the source or modification will meet all applicable emission requirements in Title 401, Chapters 50 to 63. If the cabinet determines from the application and all other available information that the proposed source or modification will not meet the applicable emission requirements, the permit to construct shall be denied.
- (2) Review of specified sources of air quality impact. In addition, the cabinet shall whether the major stationary source or major modification would be constructed in an area designated as nonattainment pursuant to 42 USC 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major. If a designated nonattainment area is projected to be an attainment area as part of an approved control strategy by the new source start-up date, offsets shall not be required if the new source would not cause a new violation.
- (3) Fugitive emission sources. Sections 5 and 11 of this administrative regulation shall not apply to a source or modification that would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to one of the following categories:
 - (a) Coal cleaning plants (with thermal dryers);
 - (b) Kraft pulp mills;
 - (c) Portland cement plants;
 - (d) Primary zinc smelters;
 - (e) Iron and steel mills;
 - (f) Primary aluminum ore reduction plants;
 - (g) Primary copper smelters;
 - (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - (i) Hydrofluoric, sulfuric, or nitric acid plants;
 - (j) Petroleum refineries;
 - (k) Lime plants;
 - (l) Phosphate rock processing plants;
 - (m) Coke oven batteries;
 - (n) Sulfur recovery plants;
 - (o) Carbon black plants (furnace process);
 - (p) Primary lead smelters;
 - (q) Fuel conversion plants;
 - (r) Sintering plants;
 - (s) Secondary metal production plants;
 - (t) Chemical process plants;
 - (u) Fossil-fuel boilers (or combination of fossil-fuel boilers) totaling more than 250 million BTUs per hour heat input;
 - (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - (w) Taconite ore processing plants;
 - (x) Glass fiber processing plants;
 - (y) Charcoal production plants;
 - (z) Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or
 - (aa) Another stationary source category which, as of August 7, 1980, is being

regulated under Title 401, Chapters 57 and 59, or 40 CFR Parts 60 and 61.

Section 4. Sources Locating In Designated Attainment or Unclassifiable Areas.

- (1) This section shall apply only to new major stationary sources or new major modifications which will locate in designated attainment or unclassifiable areas pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) if the source or modification would cause impacts which exceed the significance levels specified in Section 13 of this administrative regulation at a locality that does not or would not meet the national ambient air quality standards.
- (2) Sources to which this section applies shall meet the requirements in Section 5(1), (2) and (4) of this administrative regulation. However, the sources may be exempt from Section 5(3) of this administrative regulation.
- (3) For sources of sulfur dioxide (SO₂), particulate matter, and carbon monoxide, (CO), the determination of whether a new major source or major modification will cause or contribute to a violation of a national ambient air quality standard shall be made on a case-by-case basis using the source's allowable emissions in an approved atmospheric simulation model pursuant to 401 KAR 50:040.
- (4) For sources of NO_x, the initial determination of whether new major source or major modification would cause or contribute to a violation of the national ambient air quality standard for nitrogen dioxide (NO₂) shall be made using an approved atmospheric simulation model assuming all the nitric oxide emitted is oxidized to NO_x by the time the plume reaches ground level. The initial concentration estimates may be adjusted if adequate data are available to account for the expected oxidation rate.
- (5) For ozone, sources of VOCs locating outside a designated ozone nonattainment area shall be presumed to have no significant impact on the designated nonattainment area. If ambient monitoring indicates that the area of source location is in fact nonattainment, then the source shall be permitted under the applicable provisions of this administrative regulation until the area is designated nonattainment pursuant to 42 USC 7407(d)(IXA)(i).
- (6) The determination as to whether a new major source or major modification would cause or contribute to a violation of a national ambient air quality standard shall be made as of the start-up date.
- (7) Applications for major new sources and major modifications locating in attainment or unclassifiable areas the operation of which would cause a new violation of a national ambient air quality standard but would not contribute to an existing violation may be approved only if the following conditions are met:
 - (a) The new source is required to meet an emission limitation, or a design, operational or equipment standard, or existing sources are controlled so that the new source will not cause a violation of a national ambient air quality standard.
 - (b) The new emission limitations for the new and existing sources affected shall be state and federally enforceable in accordance with Section 7 of this administrative regulation.

Section 5. Conditions for Approval. This section shall apply to new major stationary sources or major modifications which would be constructed in an area designated as nonattainment pursuant to 42 USC 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major. Approval may be granted only if the

following conditions are met:

- (1) The new major source or major modification shall be required to meet an emission limitation which specifies the lowest achievable emission rate for the source.
- (2) The applicant shall demonstrate that all existing major sources owned or operated by the applicant (or an entity controlling, controlled by, or under common control with the applicant) in the Commonwealth of Kentucky (Commonwealth) are in compliance with all applicable emission limitations and standards specified in Title 401, Chapters 50 to 63, and 40 CFR Parts 60 and 61 and 42 USC 7401-7626, or are in compliance with an expeditious state and federally enforceable compliance schedule or a court decree establishing a compliance schedule.
- (3)
 - (a) Except in the case of VOCs or NO., emissions from existing sources in the affected area of the proposed new major source or modification (whether or not under the same ownership) shall be reduced (offset) so that there will be reasonable progress toward attainment of the applicable national ambient air quality standard. Only those transactions in which the emissions being offset are from the same criteria pollutant category shall be accepted.
 - (b) The ratio of total emission reductions of VOCs or NO., to total increased emissions of the same air pollutant shall be at least the ratio indicated for the following ozone nonattainment area classifications:
 1. For marginal nonattainment areas, at least 1.1 to 1;
 2. For moderate nonattainment areas, at least 1.15 to 1;
 3. For serious nonattainment areas, at least 1.2 to 1;
 4. For severe nonattainment areas, at least 1.3 to 1;
 5. For extreme nonattainment areas, at least 1.5 to 1.
- (4) The emission reductions shall provide a positive net air quality benefit in the affected area. Atmospheric simulation modeling shall not be required for VOCs and NO.,. Except as provided in Section 4(5) of this administrative regulation, compliance with subsection (3) of this section and Section 6(7) of this administrative regulation shall be adequate to meet this condition.
- (5) For a major, stationary source or major modification locating in an area designated nonattainment with respect to that pollutant for which the proposed source or modification is major, permits issued under this administrative regulation shall specify that construction shall not commence until the U.S. EPA has approved the cabinet's plan relating to the requirements of Nd D, Title 1, of 42 USC 7401-7626.
- (6) The proposed major stationary source or major modification shall include in the application for a construction permit an analysis of the alternative sites, sizes, production processes, and environmental control techniques for the proposed source which demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Section 6. Baseline for Determining Credit for Emission Offsets. The baseline for determining credit for emission reductions or offsets shall be the emission limitations in effect at the time the application to construct or modify a source is filed. For areas where the demonstration of attainment for the State Implementation Plan was based on actual emissions, the baseline for determining offset credit shall be actual emissions. Credit for emission offset purposes may be allowed for existing control @ goes beyond that required by regulations. Offset calculations shall be made

on a pound per hour basis when all facilities involved in the emission offset calculations are operating at their maximum expected or allowed production rate. Offsets may be calculated on a tons per year basis if baseline emissions for existing sources providing the offsets are calculated using the actual annual operating hours for the previous two (2) year period. If the cabinet requires certain hardware controls in lieu of an emission limitation, baseline allowable emissions shall be based on actual operating conditions for the previous two (2) year period in conjunction with the required hardware controls.

- (1) No applicable emission limitation. If the requirements of the cabinet do not contain an emission limitation for a source or source category, the emission offset baseline involving the source shall be actual emissions determined under actual operating conditions for the previous two (2) year period. If the emission limitations required by the cabinet allow greater emissions than the uncontrolled emission rate of the source, emission offset credit shall be allowed only for control below the uncontrolled emission rate.
- (2) Combustion of fuels. The emissions for determining emission offset credit involving an existing fuel combustion source shall be the allowable emissions under the emission limitation requirements of the cabinet for the type of fuel being burned at the time the new major source or major modification application is filed. If the existing source has switched to a different type of fuel at some earlier date, a resulting emission reduction (either actual or allowable) shall not be used for emission offset credit. If the existing source commits to switch to a cleaner fuel at some future date, emission offset credit based on the allowable emissions for the fuels involved shall not be acceptable unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emission reduction if the source switches back to a dirtier fuel at some later date.
- (3) Operating hours and source shutdown. A source may be credited with emission reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels if the work force to be affected has been notified in writing of the proposed shutdown or curtailment. Source shutdowns and curtailments in production or operating hours occurring prior to the new source application is filed shall not be used for emission offset credit. However, where an applicant can establish that it shut down or curtailed production after August 7, 1977, or less than one (1) year prior to the date of permit application, whichever is earlier, and the proposed new source is a replacement for the shutdown or curtailment, credit for such shutdown or curtailment may be applied to offset emissions from the new source.
- (4) Credit for hydrocarbon substitution. No emission offset credit shall be allowed for replacing one (1) volatile organic compound with another of lesser photochemical reactivity, unless the replacement compound is methane, ethane, 1,1,1-trichloroethane or trichlorofluoroethane.
- (5) Banking of emission offset credit. New sources obtaining permits by applying offsets after the effective date of this administrative regulation may bank offsets that exceed the requirements of Section 5(3) of this administrative regulation. An owner or operator of an existing source that reduces its own emissions may bank a resulting reduction beyond those required by regulation for use under this administrative regulation, even if the offsets are applied immediately to a new source permit. These banked emissions offsets may be used under the preconstruction review program required in 42 USC 7401-7626 as long as these banked emissions are identified and accounted for in the Commonwealth's control strategy.
- (6) Offset credit for meeting NSPS or NESHAPS. If a source is subject to an

emission limitation established in a New Source Performance Standard (NSPS) or a National Emission Standard for Hazardous Air Pollutants (NESHAPS) in compliance with Title 401, Chapters 59 and 57 respectively, and a different emission limitation is required by the cabinet, the more stringent limitation shall be used as the baseline for determining credit for emission offsets. The difference in emissions between NSPS or NESHAPS and other emission limitations shall not be used as offset credit.

- (7) Offsets. The owner or operator of a new or modified major stationary source shall comply with any offset requirement in effect under this Section for increased emissions of an air pollutant only by obtaining emission reductions of the air pollutant from the same source or other sources in the same nonattainment area, except that the cabinet may allow the owner or operator of a source to obtain the emission reductions in another nonattainment area if:
 - (a) The other area has an equal or higher nonattainment classification than the area in which the source is located; and
 - (b) Emissions from the other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located.

Section 7. Administrative Procedures. The necessary emission offsets may be proposed either by the owner of the proposed source or by the cabinet. The emission reduction shall be enforceable by the cabinet and the U.S. EPA and shall be accomplished by the start-up date of the new source. If emission reductions are to be obtained in a state that neighbors the Commonwealth for a new source to be located in the Commonwealth, the emission reductions shall be enforceable by the neighboring state or local agencies and the U.S. EPA.

- (1) Source initiated emission offsets. The owner or operator of a source may propose emission offsets which involve reductions from sources controlled by the owner (internal emission offsets) or reductions from other sources (external emission offsets), if the emission offsets meet the requirements of this section and Section 5(3) of this administrative regulation. An internal emission offset shall be made enforceable by inclusion as a condition of the new source permit. An external emission offset shall not be accepted unless the affected source is subject to a new emission limitation requirement of the cabinet to ensure that its emissions shall be reduced by a specified amount in a specified time. The form of the new emission limitation shall be enforceable by the cabinet and by the U.S. EPA.
- (2) Cabinet initiated emission offsets. The cabinet may commit to reducing emissions from existing sources (including mobile sources) to provide a net air quality benefit in the impact area of the proposed new source to accommodate the proposed new source. The commitment shall be reflected in the emission limitation requirements of the cabinet for the new and existing sources as required by this section.

Section 8. Source Obligation.

- (1) An owner or operator who constructs or operates an applicable source or modification not in accordance with the application submitted pursuant to Sections 4 and 5 of this administrative regulation or with the terms of an approval to construct or an owner or operator of a source or modification subject to this administrative regulation who begins actual construction after September 22, 1982, without applying for and receiving approval according to the requirements of this section shall be subject to appropriate enforcement action.

- (2) Approval to construct shall become invalid if construction is not commenced within eighteen (18) months after receipt of the approval, or if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The cabinet may extend the eighteen (18) month period upon satisfactory showing that an extension is justified.
- (3) Approval to construct shall not relieve an owner or operator of the responsibility to comply fully with applicable provisions of Title 401, Chapters 50 to 63, and any other requirements under local, state, or federal law.
- (4) At the time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in a state and federally enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of this administrative regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Section 9. Permit Condition Rescission.

- (1) An owner or operator holding a permit for a stationary source or modification which was issued pursuant to 401 KAR 51:050 or 401 KAR 51:051E may request that the cabinet rescind the permit condition.
- (2) The cabinet shall rescind a permit condition if so requested if the applicant can demonstrate to the satisfaction of the cabinet that this administrative regulation does not apply to the source or modification or a portion thereof if construction would have commenced after September 22, 1982, and if the owner or operator demonstrates that the rescission would not violate the requirements of Section 5(3) and Section 8 of this administrative regulation.

Section 10. Class I Areas.

- (1) The following areas which were in existence on August 7, 1977, shall be Class I areas and shall not be redesignated:
 - (a) International parks;
 - (b) National wilderness areas and national memorial parks which exceed 5,000 acres in size; and
 - (c) National parks which exceed 6,000 acres in size.
- (2) Another area, unless otherwise specified in the legislation creating the area, is designated Class H but may be redesignated as provided in 40 CFR 51.166(g), as published in the Code of Federal Regulations, Title 40, July 1, 1991.
- (3) The visibility protection requirements of this section and Section 11 of this administrative regulation shall apply only to sources which may impact a mandatory Class I federal area.
- (4) The following areas may be redesignated only as Class I or II:
 - (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national shore or seashore; and
 - (b) A national park or national wilderness area established after August 7,

1977, which exceeds 10,000 acres in size.

Section 11. Protection of Visibility.

- (1) New source review-applicability and exemptions.
 - (a) No stationary source or modification to which this section applies shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements.
 - (b) This section shall apply to construction of a new major stationary source or major modification that would both be constructed in an area designated as nonattainment under 42 USC 7407(d)(1)(A)(i) and potentially have an impact on visibility in a Class I area.
 - (c) This section shall apply to a major stationary source or major modification for each pollutant subject to regulation under 42 USC 7401-7626 that it would emit, except as provided in paragraphs (d) and (e) of this subsection.
 - (d) This section shall not apply to a particular major stationary source or major modification if:
 1. The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at the institution, and the Governor of the Commonwealth requests that it be exempt from those requirements.
 2. The source is a portable stationary source which has previously received a permit under this section; and:
 - a. The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary;
 - b. The emissions from the source would not exceed its allowable emissions;
 - c. The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and
 - d. Reasonable notice is given to the cabinet prior to the relocation, identifying the proposed new location and the probable duration of operation at the new location. The notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet.
 - (e) This section shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:
 1. Would impact no Class I area and no area where an applicable increment is known to be violated; and
 2. Would be temporary.
- (2) Visibility impact analyses. The owner or operator of a source shall provide an analysis of the impairment to visibility that would occur in a Class I area as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification.

- (3) Federal land manager notification.
- (a) The federal land manager and the federal official charged with direct responsibility for management of Class I areas have an affirmative responsibility to protect the air quality related values (including visibility) of the Class I lands and to consider, in consultation with the cabinet, whether a proposed source or modification will have an adverse impact on these values.
 - (b) The cabinet shall provide written notification to all affected federal land managers of a permit application for a proposed new major stationary source or major modification that may affect visibility in a Class I area. The cabinet shall also provide the notification to the federal official charged with direct responsibility for management of lands within the Class I area. The notification shall include a copy of all information relevant to the permit application and shall be given within thirty (30) days of receipt and at least sixty (60) days prior to a public hearing on the application for a permit to construct. The notification shall include an analysis of the proposed source's anticipated impacts on visibility in a Class I area. The cabinet shall also notify all affected federal land managers within thirty (30) days of receipt of an advance notification of the permit application.
 - (c) The cabinet shall consider an analysis performed by the federal land manager provided within thirty (30) days of the notification and analysis required by paragraph (b) of this subsection, that the proposed new major stationary source or major modification may have an adverse impact on visibility in a Class I area. If the cabinet finds that the analysis does not demonstrate to the satisfaction of the cabinet that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public hearing notice required in 401 KAR 50:035, Section 4, either explain that decision or give notice as to where the explanation can be obtained.
 - (d) Adverse impact on visibility as it applies to Section 11(3)(c) of this administrative regulation shall be determined on a case-by-case basis, taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with the times of visitor use of the Class I area, and the frequency and time of natural conditions that reduce visibility.
- (4) Public participation. The cabinet shall follow the applicable procedures of 401 KAR 50:035 in processing applications under this section. The cabinet shall follow the procedures at 40 CFR 52.21(r) as in effect on August 7, 1980, to the extent that the procedures of 401 KAR 50:035 do not apply.
- (5) National visibility goal. The cabinet shall only issue permits to those sources whose emissions will be consistent with making reasonable progress toward the national goal of preventing future, and remedying existing, impairment of visibility in Class I areas which impairment results from manmade air pollution. In making the decision to issue a permit the cabinet may take into account the overriding factors of the cost of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source.
- (6) Monitoring. The cabinet may require monitoring of visibility in a Class I area near the proposed new stationary source or major modification using human observations, teleradiometers, photographic cameras, nephelometers, fine particulate monitors, or other appropriate methods as specified by the U.S. EPA. The method selected shall be determined on a case-by case basis by the cabinet.

The cabinet shall not undertake visibility monitoring in a Class I area without the approval of the federal land manager. Data obtained from visibility monitoring shall be made available to the cabinet, the federal land manager, and the U.S. EPA, upon request.

Section 12. Significant Pollutant and Emission Rate. For this administrative regulation, the following pollutant and emission rates shall be considered significant.

Carbon monoxide:	100 tons per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Particulate matter:	25 tpy of particulate matter emissions
	15 tpy of PM ₁₀ emissions
Ozone:	40 tpy of volatile organic compounds
Lead:	0.6 tpy

Section 13. Significant Levels of Air Quality Impact. For this administrative regulation, the following levels of air quality impact shall be considered significant.

Pollutant	Averaging Time				
	Annual Average	24-Hour	8-Hour	3-Hour	1-Hour
Sulfur Dioxide	1.0 µg/m ³	5 µg/m ³	-----	25µg/m ³	-----
PM ₁₀	1.0µg/m ³	5 µg/m ³	-----	-----	-----
Nitrogen Dioxide	1.0µg/m ³	-----	-----	-----	-----
Carbon Monoxide	-----	-----	0.5mg/m ³	-----	2mg/m ³

Effective Date: February 8, 1993

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg	Replaced Emergency Regulation (401 KAR 51:052E)		
1st Revision	JUL 07, 1988	FEB 07, 1990	55 FR 4169
2nd Revision	FEB 17, 1993	JUN 23, 1994	59 FR 32343

401 KAR 51:160. NOx requirements for large utility and industrial boilers.

RELATES TO: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121, 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410

STATUTORY AUTHORITY: KRS 224.10-100(5), 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121, 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) requires the Natural Resources and Environmental Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation establishes requirements for the control of nitrogen oxides (NOx) emissions from large boilers and turbines used in power plants and other industrial applications, pursuant to the federal mandate published under the NOx SIP Call. This administrative regulation is not more stringent nor otherwise different than the provisions allowed under the federal mandate.

Section 1. Applicability. This administrative regulation shall apply to NOx budget units that are electric-generating units or industrial boilers or turbines, except as provided in Section 2 of this administrative regulation.

Section 2. Exemptions.

- (1) Exemptions based on permit limitations. A NOx budget unit shall be exempt from Sections 3 to 8 of this administrative regulation if the owner or operator complies with this subsection.
 - (a) The source shall have a federally-enforceable permit issued by the cabinet containing conditions for the unit that:
 1. Limit the unit's NOx emissions during each control period beginning in 2004 to twenty-five (25) tons or less;
 2. Restrict the unit to burning only natural gas or fuel oil during a control period in 2004 and each control period thereafter;
 3. Restrict the unit's operation hours during each control period to the number calculated by dividing twenty-five (25) tons of potential NOx mass emissions by the unit's maximum potential hourly NOx mass emissions;
 4. Require that the unit's potential NOx mass emissions shall be calculated pursuant to 40CFR 96.4(b)(1)(iii);
 5. Require that the owner or operator of the unit shall retain at the source that includes the unit, for five (5) years, records demonstrating that the operating hours restriction, the fuel use restriction, and the other requirements of the permit related to these restrictions were met; and
 6. Require that, by November 1 of each year for which the unit is subject to the federally-enforceable permit, the owner or operator of the unit, through the authorized account representative, shall:
 - a. Secure and transfer to an account established pursuant to 401 KAR 51:19, NOx allowances for each control period in an amount equal to the NOx emission limitation (in tons of NOx) under

subparagraphs 1 and 3 of this paragraph upon which the unit's exemption is based; and

- b. Report to the cabinet the unit's hours of operation (treating any partial hour of operation as a whole hour of operation) and the number of NOx allowances transferred pursuant to clause a of this subparagraph.
- (b) A unit with an exemption based on permit limitations shall become subject to all the applicable provisions of this administrative regulation and shall be treated as commencing commercial operation on September 30 of any control period for which:
 - 1. The fuel use restriction in paragraph (a)2 of this subsection or the operating hours restriction in paragraph (a)3 of this subsection is removed from the unit's federally-enforceable permit or otherwise becomes no longer applicable; or
 - 2. The unit does not comply with the restrictions of this subsection.
- (c) Units exempted under this subsection shall not receive a NOx allowance allocation under Section 4 of this administrative regulation.
- (d) By November 30 of each year beginning in 2004, the cabinet shall report to the U.S.EPA:
 - 1. The total NOx emission limitation (in tons of NOx) for all units exempted under this subsection; and
 - 2. The total NOx allowances reported to the cabinet pursuant to paragraph (a)6b of this subsection.
- (e) For units exempted under this subsection, the cabinet shall notify the U.S. EPA, in writing:
 - 1. Of permit changes that remove a limit or render it no longer applicable; and
 - 2. Any violation of a permit limit imposed pursuant to paragraph (a) of this subsection.
- (2) Retired unit exemption.
 - (a) A NOx budget unit shall be exempt from the requirements in Sections 3 to 7 of this administrative regulation on the date that the unit is permanently retired, if the following conditions are met:
 - 1. Except as provided in paragraph (b) of this subsection, the retired unit shall not emit NOx on or after the day it is retired; and
 - 2. Within thirty (30) days after the unit is retired, the NOx authorized account representative shall submit:
 - a. A letter to the cabinet and to the U.S. EPA describing the unit, the date of retirement, and the reason for retirement; and
 - b. An application for a permit revision that reflects the status of the retired unit pursuant to 401 KAR 52:020 or 401 KAR

52:030, as appropriate; and

3. Unless the unit has been physically removed, records to demonstrate that the unit has not been operated shall be:
 - a. Maintained on-site for five (5) years from the date of retirement; and
 - b. Made available to the cabinet or the U.S. EPA upon request.
- (b) Operation of a retired unit shall not be resumed unless the owner or operator submits an application and receives a permit revision pursuant to 401 KAR 52:020 or 401 KAR 52:030, as appropriate, prior to commencing operation.
- (c) A retired unit shall not be allowed to opt into 401 KAR 51:190, Banking and trading NOx allowances and shall not receive a NOx allowance allocation under Section 4 of this administrative regulation.
- (d) NOx allowances made to a unit that later retires shall:
 1. Remain with the unit until they are transferred or deducted; and
 2. Cease to be allocated to the unit at the end of the allocation period.
- (e) The cabinet shall notify the U.S. EPA, in writing, of units that are exempted under this subsection.

Section 3. Compliance Requirements.

- (1) NOx budget emissions limitation requirements. Commencing with the later date of May 31, 2004, or the year the unit commences operation, the owner or operator of a NOx budget unit shall:
 - (a) Beginning May 1, 2003, and May 1 of each year thereafter, monitor the total NOx emissions during each control period as specified in 40 CFR 96.70 to 96.76; and
 - (b) By November 30 of each year, hold NOx allowances available for compliance deductions in an amount at least equal to the total NOx emissions during the control period as specified in 401 KAR 51:190.
- (2) NOx allowance provisions. NOx allowances shall be held in, deducted from, or transferred among the NOx compliance, overdraft, and general accounts as specified in 401 KAR 51:190 and this subsection.
 - (a) The NOx budget source shall establish a general account in the NOx allowance Tracking System (NATS) by submitting "EPA Form 7620-15, General Account information".
 - (b) NOx budget units shall transfer NOx allowances under the NOx Budget Trading Program from one (1) account to another in the NOx Allowance Tracking System (NATS) by submitting "EPA Form 7620-14".
 - (c) NOx allowances shall not be deducted for compliance with subsection (1) of this section for a control period prior to the year for which the NOx allowances were allocated.
 - (d) If the U.S. EPA records the allocation, transfer, or deduction of NOx

allowances from the compliance or overdraft account of a NOx budget source, this action shall:

1. Automatically amend and become part of the NOx budget portion of the source's permit; and
 2. Require no further review.
- (e) The owner or operator of a NOx budget unit having excess NOx emissions for each control period beginning in 2004, shall comply with 401 KAR 51:190.
- (f) Allocated NOx allowances shall not constitute a property right.
- (3) Recordkeeping and reporting requirements.
- (a) The owner or operator of a NOx budget source shall maintain the following records:
1. The "Account Certificate of Representation" for the source's NOx authorized account representative;
 2. Emissions monitoring information as specified in 40 CFR 96.70 to 96.76;
 3. Copies of all reports, compliance certifications, and other submissions and records required by 401 KAR 51:190; and
 4. Copies of documents used to complete permit revision applications or to demonstrate compliance with 401 KAR 51:190.
- (b) These records shall be:
1. Used to demonstrate compliance with subsection (1) of this section;
 2. Maintained on site for a period of five (5) years, unless a longer period is required by 40 CFR 96.70 to 96.76 or the cabinet or the U.S. EPA requires an extended period for cause; and
 3. Made available for inspection on request by the cabinet or the U.S. EPA.
- (4) Computation of time.
- (a) A time period scheduled to begin on the occurrence of an act or event shall begin on the day the act or event occurs.
- (b) A time period scheduled to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.
- (c) If the final day of a time period falls on a weekend or state or federal holiday, the time period shall be extended to the next business day.

Section 4. Methodology for the Allocation and Sale of NOx Allowances. The number of NOx allowances to be allocated to each NOx budget unit by the cabinet and to be sold by the Commonwealth of Kentucky shall be determined pursuant to this section.

- (1) The total number of NOx allowances shall be the number of NOx allowances assigned to Kentucky by the U.S. EPA and approved in Kentucky's State

Implementation Plan (SIP).

- (2) The total number of NOx allowances assigned to Kentucky shall be divided into separate pools as follows:
 - (a) The number of NOx allowances specified in Kentucky's approved SIP for electric generating units with:
 1. Ninety-five (95) percent of this amount allocated for the 2004 to 2006 allocation period to units that commence commercial operation on or before May 1, 2001;
 2. Five (5) percent of this amount for the 2004 to 2006 allocation period sold by the Commonwealth of Kentucky with the proceeds deposited in Kentucky's general fund;
 3. Ninety-eight (98) percent of this amount allocated for each allocation period beginning with the 2007 to 2009 allocation period to units that commence commercial operation on or before May 1 of the year that is three (3) years before the first year of the applicable allocation period; and
 4. Two (2) percent of this amount for each allocation period beginning with the 2007 to 2009 allocation period and each allocation period thereafter sold by the Commonwealth of Kentucky with the proceeds deposited in Kentucky's general fund; and
 - (b) The number of NOx allowances specified in Kentucky's approved SIP for industrial boilers or turbines with:
 1. Ninety-eight (98) percent of this amount allocated for each allocation period to units that commence commercial operation on or before May 1 of the year that is three (3) years before the first year of the applicable allocation period; and
 2. Two (2) percent of this amount allocated for each allocation period to NOx budget units that commence commercial operation after May 1 of the year that is three (3) years before the first year of the applicable allocation period and on or before May 1 of the applicable control period.
- (3) The cabinet shall notify the U.S. EPA and NOx budget sources of the NOx allowances to be allocated and sold from the pools specified in subsection (2) of this section pursuant to Section 5(4) of this administrative regulation.
- (4) For allocation of the pools specified in subsection (2)(a)1, 3 and (b) of this section, heat input, in MMBTU, of a NOx budget unit shall be determined from:
 - (a) The average of the two (2) highest amounts of the unit's heat input from the three (3) most recent control periods as determined in accordance with 40 CFR Part 75 or 96.70 to 96.76 if the unit is subject to 40 CFR Part 75; or
 - (b) The best available data reported to the cabinet for the unit if the unit is not otherwise subject to 40 CFR Part 75.
- (5) For electric generating units included in the pools specified in subsection (2)(a)1 and 3 of this section, the cabinet shall allocate NOx allowances to each NOx budget unit in an amount equal to the result obtained by:

- (a) Multiplying 0.15 lb/MMBTU or the permit limit, whichever is less, by the heat input determined under Section 4(4) of this administrative regulation, rounded to the nearest whole NOx allowance as appropriate.
 - (b) If the initial total number of NOx allowances allocated for an allocation period to all NOx budget units in Kentucky included in the pools specified in subsection (2)(a)1 and 3 of this section does not equal ninety-five (95) percent for the 2004 to 2006 allocation period, or ninety-eight (98) percent for each allocation period thereafter, of the number of tons of NOx emissions in Kentucky's trading program budget apportioned to existing electric generating units, the cabinet shall:
 - 1. Adjust the total number of NOx allowances allocated to all electric generating units in the applicable pool so that the total number of NOx allowances allocated equals ninety-five (95) percent for the 2004 to 2006 allocation period, or ninety-eight (98) percent for each allocation period thereafter, of the number of tons of NOx emissions in Kentucky's trading program budget apportioned to electric generating units; and
 - 2. Make this adjustment by multiplying each unit's allocation by ninety-five (95) percent for the 2004 to 2006 allocation period, or ninety-eight (98) percent thereafter, of the number of tons of NOx emissions in Kentucky's trading program budget apportioned to electric generating units divided by the total number of NOx allowances allocated under paragraph (a) of this subsection, and rounding to the nearest whole NOx allowance as appropriate.
- (6) For industrial boilers or turbines included in the pool specified in subsection (2)(b)1 of this section, the cabinet shall allocate NOx allowances to each NOx budget unit in an amount equal to the result obtained by:
- (a) Multiplying 0.17 lb/MMBTU or the permit limit, whichever is less, by the heat input determined under subsection (4) of this section, rounded to the nearest whole NOx allowance as appropriate.
 - (b) If the initial total number of NOx allowances allocated for an allocation period to all NOx budget units in Kentucky included in the pool specified in subsection (2)(b)1 of this section does not equal ninety-eight (98) percent for each allocation period, of the number of tons of NOx emissions in Kentucky's trading program budget apportioned to existing industrial boilers or turbines, the cabinet shall:
 - 1. Adjust the total number of NOx allowances allocated to all industrial boilers or turbines in the applicable pool so that the total number of NOx allowances allocated equals ninety-eight (98) percent for each allocation period, of the number of tons of NOx emissions in Kentucky's trading program budget apportioned to industrial boilers or turbines; and
 - 2. Make this adjustment by multiplying each unit's allocation by ninety-eight (98) percent, of the number of tons of NOx emissions in Kentucky's trading program budget apportioned to industrial boilers or turbines divided by the total number of NOx allowances allocated under paragraph (a) of this subsection, and rounding to the nearest whole NOx allowance as appropriate.
- (7) (a) The Commonwealth of Kentucky shall establish an account pursuant to 401 KAR 51:190 for the purpose of selling the NOx allowances in the pools

specified in subsection (2)(a)2 and 4 of this section. The proceeds from the sale of the NOx allowances shall be deposited in the general fund of the Commonwealth of Kentucky.

- (b) For NOx budget units included in the pool specified in subsection (2)(b)2 of this section, the cabinet shall allocate NOx allowances to each unit according to the following procedures:
1. The cabinet shall establish one (1) allocation set-aside for each control period. Each allocation set-aside shall be allocated NOx allowances equal to two (2) percent for each control period of the tons of NOx emissions in Kentucky's trading program budget, rounded to the nearest whole NOx allowance as appropriate.
 2. The NOx authorized account representative may submit to the cabinet a request, in writing, to be allocated NOx allowances starting with the control period during which the NOx budget unit commences commercial operation, or is projected to commence commercial operation, and ending with the control period preceding the control period for which it will receive an allocation under subsection (2)(b)1 of this section.
 - a. The NOx allowance allocation request shall be submitted prior to May 1 of the first control period for which the NOx allowance allocation is requested and after the date on which the cabinet issues a permit to construct to the NOx budget unit; and
 - b. For a control period, the NOx authorized account representative may request NOx allowances in an amount that does not exceed 0.17 lb/MMBTU or the permitted limit, whichever is less, multiplied by the NOx budget unit's maximum design heat input in MMBTU/hr multiplied by the number of hours remaining in the control period starting with the first day in the control period on which the unit operated or is projected to operate.
 3. The cabinet shall review, and allocate NOx allowances pursuant to, each NOx allowance allocation request in the order that the requests are received by the cabinet as of the close of business each day, with each consecutive day determining the order:
 - a. Upon receipt of the NOx allowance allocation request, the cabinet shall determine whether, and shall make any necessary adjustments to the request to ensure that the control period and the number of NOx allowances specified are consistent with the requirements of this subsection;
 - b. If the allocation set-aside for the control period for which NOx allowances are requested:
 - (i) Has an amount of NOx allowances not less than the number requested, as adjusted by the cabinet, the cabinet shall allocate the amount of the NOx allowances requested, as adjusted by the cabinet, to the NOx budget unit.
 - (ii) Has a smaller amount of NOx allowances than the number requested, as adjusted by the cabinet, the cabinet will deny in part the request and allocate only the remaining

number of NOx allowances in the allocation set-aside to the NOx budget unit.

- (iii) Once an allocation set-aside for a control period has been depleted of all NOx allowances, the cabinet shall deny, and shall not allocate any NOx allowances pursuant to a NOx allowance allocation request under which NOx allowances have not already been allocated for the control period.
- 4. Within sixty (60) days of receipt of a NOx allowance allocation request, the cabinet shall take appropriate action under this subsection and shall notify the U.S. EPA of the number of NOx allowances allocated for the control period to the NOx budget unit.
- 5. For a NOx budget unit that is allocated NOx allowances under this subparagraph, the U.S. EPA shall deduct NOx allowances to account for the actual utilization of the unit during the control period, and for any NOx allowances returned to Kentucky, the cabinet shall allocate to the NOx budget units in Kentucky using the following formula and rounding to the nearest whole NOx allowance as appropriate:
 - a. Unit's share of NOx allowances remaining in allocation set-aside equals total NOx allowances remaining in allocation set-aside multiplied by the quantity generated by dividing the unit's NOx allowance allocation by Kentucky's trading program budget excluding allocation set-aside;
 - b. If:
 - (i) Total NOx allowances remaining in allocation set-aside is the total number of NOx allowances remaining in the allocation set-aside for the control period to which the allocation set-aside applies;
 - (ii) Unit's NOx allowance allocation is the number of NOx allowances allocated under subsection (2)(b)2 of this section to the unit for the control period to which the allocation set-aside applies; and
 - (iii) State trading program budget excluding allocation set-aside is Kentucky's trading program budget for the control period to which the allocation set-aside applies multiplied by ninety-five (95) percent if the control period is in 2004, 2005, or 2006 or ninety-eight (98) percent if the control period is in any year thereafter, rounded to the nearest whole NOx allowance as appropriate.
- (8) NOx allowances created pursuant to 401 KAR 51:180 for early reduction credits or emergency compliance shall not be included in the allocation or sale of the pools specified in this section.

Section 5. Allocation of NOx Allowances.

- (1) The cabinet shall determine the number of NOx allowances to be allocated to eligible NOx budget units for the allocation period beginning in 2004 and in each subsequent allocation period using the method described in Section 4 of this administrative regulation.

- (2) A NOx budget unit that commences commercial operation on or before May 1 of the year that is three (3) years before the first year of the applicable allocation period shall be included in the applicable allocation pool as specified in Section 4(2)(a)1, 3, or (b)1 of this administrative regulation.
- (3) If the U.S. EPA changes the number of NOx allowances assigned to Kentucky before the end of an allocation period, the cabinet shall reallocate the NOx allowances prior to the beginning of the next control period in the same ratio as the original allocation for that period.
- (4) The cabinet shall notify the U.S. EPA and NOx budget sources of the NOx allowances to be allocated and sold by the Commonwealth of Kentucky pursuant to this section and Section 4 of this administrative regulation:
 - (a) For units that commence commercial operation on or before May 1 of the year that is three (3) years before the first year of the applicable allocation period:
 - 1. Not later than sixty (60) days after the effective date of this administrative regulation for the allocation period beginning in 2004; and
 - 2. By April 1 of the year that is three (3) years prior to the next allocation period; and
 - (b) By April 1 of each year, beginning in 2004, for units in the pool specified in Section 4(2)(b)2 of this administrative regulation that commence commercial operation after May 1 of the year that is three (3) years before the first year of the applicable allocation period and on or before May 1 of the applicable control period.
- (5) Excess NOx allowances may be banked and traded according to 401 KAR 51:190.

Section 6. Application for NOx Budget Permit or Permit Revision.

- (1) The NOx authorized account representative of a NOx budget source shall submit an application to revise the source's permit pursuant to 401 KAR 52:020 or 401 KAR 52:030, as appropriate, and this section. For this purpose, the source shall use:
 - (a) "Forms DEP7007A1 to DD, Permit Application to Construct or Operate an Air Contaminant Source," as applicable. Forms DEP7007A1 to DD is incorporated by reference in 401 KAR 52:050; and
 - (b) "Form DEP7007EE, NOx Budget Permit Application".
- (2) The application shall include the following information:
 - (a) The Office of Regulatory Information Systems (ORIS) or facility code assigned to the source by the Energy Information Administration;
 - (b) Identification of:
 - 1. Each NOx budget unit at the source;
 - 2. Each retired unit; and
 - 3. Each unit exempted pursuant to Section 2(1) of this administrative regulation;

- (c) A statement that explains if the unit is:
 - 1. A unit described in Section 1 of this administration regulation; or
 - 2. An opt-in unit pursuant to 401 KAR 51:195;
- (d) The applicable requirements of Section 3 of this administrative regulation; and
- (e) For opt-in units, the following certification statement signed by the NOx authorized account representative: "I certify that each unit for which this permit application is submitted, pursuant to the opt-in provisions of 401 KAR 51:195, is operating; is not a NOx budget unit pursuant to 401 KAR 51:160, Section 1; and is not covered by a retired exemption unit that is in effect pursuant to 401 KAR 51:160, Section 2(2)."

Section 7. Compliance.

- (1) Compliance certification. On or before November 30 each year, beginning in 2004, the NOx authorized account representative shall submit a compliance certification report to the cabinet and to the U.S. EPA pursuant to 401 KAR 51:190.
- (2) Reporting to the cabinet. Reports that are required to be submitted to the cabinet shall be mailed to:
 - 1. Manager, Permit Review Branch, Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601; and
 - 2. To the appropriate Regional Office of the Division for Air Quality listed in Section 8(2) of this administrative regulation.

Section 8. Incorporation by Reference.

- (1) The following material is incorporated by reference:
 - (a) 40 CFR 96.70 to 96.76, "Monitoring and Reporting", as published in the Code of Federal Regulations, 40 CFR Part 96, July 1, 1999;
 - (b) "Form DEP7007EE, NOx Budget Permit Application", May 2002;
 - (c) "EPA Form 7620-14, Allowance Transfer", United States Environmental Protection Agency, OMB No. 2060-0445;
 - (d) "EPA Form 7620-15, General Account Information", United States Environmental Protection Agency, OMB No. 2060-0445; and
 - (e) "EPA Form 7620-16, Account Certificate of Representation", United States Environmental Protection Agency, OMB No. 2060-0445.
- (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the following offices of the Division for Air Quality, Monday through Friday, 8 a.m. to 4:30 p.m.:
 - (a) The Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601, (502) 573-3382; and
 - (b) The appropriate regional office of the Division for Air Quality as follows:
 - 1. Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky

41105, (606) 920-2067;

2. Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky 42104, (270) 746-7475;
 3. Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence, Kentucky 41042, (859) 525-4923;
 4. Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701, (606) 435-6022;
 5. London Regional Office, 875 South Main Street, London, Kentucky 40741, (606) 878-0157;
 6. Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700, Owensboro, Kentucky 42303, (270) 687-7304; and
 7. Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky 42003, (270) 898-8468.
- (3) (a) Copies of the Code of Federal Regulations (CFR) and Federal Register (Fed. Reg.) are available for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
- (b) Copies of Forms DEP7007EE-1 to EE-3 are available on the Internet at <http://www.nr.state.ky.us/nrepc/dep/daq/prb/daqapp.htm>. (27 Ky.R. 2606; Am. 3276; 28 Ky.R. 373; eff. 8-15-2001; 29 Ky.R. 540; 1605; eff. 12-18-02.)

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg	JAN 31, 2002	APR 11, 2002	67 FR 17624
1st Revision	FEB 28, 2003	JUN 24, 2003	68 FR 37418

401 KAR 51:170. NOx requirements for cement kilns.

RELATES TO: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410

STATUTORY AUTHORITY: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation provides for the regional control of nitrogen oxides (NOx) emissions from portland cement manufacturing plants pursuant to the federal mandate published under the NOx SIP Call. This administrative regulation is not more stringent nor otherwise different than the provisions allowed under the federal mandate.

Section 1. Applicability. This administrative regulation shall apply to a portland cement manufacturing plant with process rates, on or after January 1, 1995, equal to or greater than:

- (1) Twelve (12) tons of clinker per hour for a long dry kiln;
- (2) Ten (10) tons of clinker per hour for a long wet kiln;
- (3) Sixteen (16) tons of clinker per hour for a preheater kiln; or
- (4) Twenty-two (22) tons of clinker per hour for a precalciner or preheater/precalciner kiln.

Section 2. Standard for Kilns.

(1) On and after May 31, 2004, the owner or operator of a kiln specified in Section 1 of this administrative regulation shall, during a control period, operate the kiln so that NOx emissions do not exceed six and six-tenths (6.6) lbs per ton of clinker averaged over a thirty (30) day rolling period.

(2) The requirements in subsection (1) of this section shall not apply during:

- (a) Periods of start-up, shutdown, or malfunction that do not exceed thirty-six (36) consecutive hours; and
- (b) Regularly scheduled maintenance activities.

Section 3. Reporting, Monitoring, and Recordkeeping for Kilns.

(1) Reporting requirements. The owner or operator of a kiln specified in Section 1 of this administrative regulation shall submit the following reports to the cabinet at the locations specified in Section 4 of this administrative regulation:

- (a) By May 31, 2004, a report that includes:
 1. The number and types of kilns;
 2. The name and address of the plant where the kilns are located; and

3. The name and telephone number of the person responsible for demonstrating that the kiln is in compliance.

(b) By October 31 each year, beginning in 2004, a report that documents the total Nox emissions from the kiln during the control period.

(2) Monitoring requirements. Beginning April 1, 2004, the owner or operator of a kiln specified in Section 1 of this administrative regulation shall monitor NOx emissions during each control period in accordance with provisions in 40 CFR 96.70 to 96.76.

(3) Recordkeeping requirements. An owner or operator of a kiln specified in Section 1 of this administrative regulation shall maintain all records necessary to demonstrate compliance with the standards in Section 2 of this administrative regulation for a period of two (2) years. These records shall:

(a) Be kept at the facility where the kiln is located;

(b) Be made available to the cabinet or the U.S. EPA upon request; and

(c) Contain the following information:

1. Emissions, in pounds of NOx per ton of clinker, from the kiln;

2. The results of all performance tests;

3. Daily production records; and

4. The date, time, and duration of all startups, shutdowns, or malfunctions in the operation of the kiln or emissions monitoring equipment.

Section 4. Reporting to the Cabinet. Reports required to be submitted to the cabinet shall be mailed to:

(1) Manager, Permit Review Branch, Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601; and

(2) To the appropriate Regional Office of the Division for Air Quality as follows:

(a) Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky 41105, (606) 920-2067;

(b) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky 42104, (270) 746-7475;

(c) Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence, Kentucky 41042, (859) 525-4923;

(d) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701, (606) 435-6022;

(e) London Regional Office, 875 South Main Street, London, Kentucky 40741, (606) 878-0157;

(f) Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700, Owensboro, Kentucky 42303, (270) 687-7304; and

(g) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky 42003, (270) 898-8468. (27 Ky.R. 2609; Am. 3281; eff. 8-15-2001.)

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg	JAN 31, 2002	APR 11, 2002	67 FR 17624

401 KAR 51:180. NOx credits for early reduction and emergency.

RELATES TO: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96 , 42 USC 7410

STATUTORY AUTHORITY: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation provides for the distribution of NOx allowances from a compliance supplement pool allocated to Kentucky by the U.S. EPA for sources that reduce nitrogen oxides (NOx) emissions before the compliance deadline of the federal mandate published under the Nox SIP Call. It also provides for setting aside unused credits to assist sources that are unable to meet the compliance deadline. This administrative regulation is not more stringent nor otherwise different than the provisions allowed under the federal mandate.

Section 1. Applicability. This administrative regulation shall apply to a NOx budget unit in Kentucky.

Section 2. Procurement and Use of Early Reduction Credits (ERCs).

(1) ERCs may be earned for reductions in NOx emissions achieved during the 2001, 2002, and 2003 control periods.

(2) NOx allowances given for earned ERCs may be deducted for compliance with NOx emission standards in 401 KAR 51:160 only during the 2004 and 2005 control periods.

(3) ERCs shall not be earned for emission reductions made to satisfy requirements under the Clean Air Act.

Section 3. The Compliance Supplement Pool.

(1) The compliance supplement pool shall be divided into separate pools (utility and industry) based on the ratio of the NOx emission reductions required from each group to the total reductions required from both groups multiplied by the number of ERCs in the compliance supplement pool as specified in the Kentucky State Implementation Plan (SIP).

(2) The utility pool shall be further divided into separate annual allocations as follows:

(a) Twenty (20) percent of the utility pool to be allocated for NOx emission reductions achieved in 2001;

(b) Thirty (30) percent of the utility pool to be allocated for NOx emission reductions achieved in 2002; and

(c) Fifty (50) percent of the utility pool to be allocated for NOx emission reductions achieved in 2003.

(3) The entire industry pool shall be available for distribution beginning in 2002 and

shall be allocated annually through 2004 for NOx emission reductions achieved in 2001, 2002, and 2003 or until all available NOx allowances are allocated.

(4) Unrequested NOx allowances from the previous year shall be made available in the applicable pool for the next annual allocation.

Section 4. Methodology for Determining Allocation of ERCs.

(1) The annual allocation of ERCs shall be made based on the actual NOx emission reductions achieved for each NOx budget unit during the 2001, 2002, and 2003 control periods compared to the unit's baseline NOx emission rate during the 2000 control period.

(2) Baseline emissions shall be determined using the procedures in 40 CFR 96.70 to 96.76.

(3) ERCs shall be granted only for NOx emission reductions that are monitored pursuant to Section 6 of this administrative regulation and reported pursuant to Section 7 of this administrative regulation.

(4) An ERC shall be granted for each ton of NOx emission reduction achieved below 0.45 lbs/MMBTU or the average NOx emission rate (in lbs/MMBTU) from the baseline control period in 2000, whichever is less.

(5) ERCs shall be rounded to the nearest whole number and distributed in the form of one (1) NOx allowance for one (1) ton of NOx emission reduction.

(6) If the requests for ERCs exceeds the maximum NOx allowances available for distribution in the applicable pool for an annual allocation, the cabinet shall distribute the ERCs on a proportional basis using the following calculation: the NOx budget unit's allocated ERCs shall equal the unit's NOx emission reductions determined pursuant to subsection (3) of this section divided by the total NOx emission reductions from all units in the applicable pool multiplied by the ERCs available for distribution in that pool.

(7) NOx allowances shall be distributed annually on or before May 1 of each year for the previous year's NOx emission reductions beginning in 2002 and ending in 2004.

(8) The cabinet shall notify the U.S. EPA of the final allocation on or before May 31, 2004.

Section 5. NOx Credits for Emergency Use. After allocations are made pursuant to Section 4 of this administrative regulation for 2001, 2002, and 2003, credits that remain in the compliance supplement pools shall be used by the cabinet to assist sources that are unable to meet the compliance deadline in 401 KAR 51:160 according to the following restrictions:

(1) ERCs remaining in the utility pool shall only be used to assist electric generating units and ERCs remaining in the industry pool shall only be used to assist industrial boilers or turbines.

(2) Credits shall be issued by the cabinet to extend the compliance deadline only for sources that meet the following conditions:

(a) Electric generating units for which meeting the compliance deadline would seriously jeopardize the reliability of the electric supply, and for which it was not feasible to import electricity from other sources in order to meet the deadline;

(b) Industrial boilers and turbines for which meeting the compliance deadline would create an undue risk comparable to that for utility sources in paragraph (a) of this subsection; and

(c) Sources able to demonstrate that it was not possible to acquire sufficient Nox allowances to meet the compliance deadline by:

1. Generating ERCs;
2. Acquiring ERCs from other sources; or
3. Acquiring NOx allowances from the NOx Budget Trading Program.

(3) Allowances shall be allocated, based upon need, in 2004 and 2005.

(4) A public hearing shall take place before allowances are allocated.

Section 6. Monitoring Requirements.

(1) Monitoring shall be performed on a NOx budget unit for which early reduction credit is to be obtained during the 2000 control period and each subsequent control period during which NOx emission reductions will occur.

(2) Units shall be monitored in accordance with 40 CFR 96.70 to 96.76.

Section 7. Reporting Requirements.

(1) The owner or operator of a NOx budget source that achieves early reductions pursuant to this administrative regulation shall submit a report to the cabinet on or before January 30 of each year following the year in which reductions were achieved for the years of 2001, 2002, and 2003, documenting the actual NOx emission reductions achieved by each NOx budget unit during each control period compared to the unit's actual emissions during the 2000 control period. These reports shall contain the following information, for each NOx budget unit:

(a) Identification and location of the unit that achieved NOx emission reductions;

(b) The maximum design heat input for the unit, expressed in MMBTU/hr;

(c) For the 2000 control period and each control period during which NOx emission reductions are achieved:

1. The total hours of operation;
2. The total NOx emissions, in tons;
3. The average NOx emission rate, in lbs/MMBTU;
4. The maximum allowable NOx emission rate, based on the most stringent applicable requirement, in lbs/MMBTU; and
5. Calculations showing the tons of NOx emission reductions below 0.45 lbs/MMBTU or the average NOx emission rate (in lbs/MMBTU) from the baseline season, whichever is less.

(2) The report required in subsection (1) of this section shall be signed by the owner or operator of the NOx budget source and submitted to:

(a) Manager, Permit Review Branch, Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601; and

(b) The appropriate regional office of the Division for Air Quality as follows:

1. Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky 41105, (606) 920-2067;

2. Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky 42104, (270) 746-7475;

3. Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence, Kentucky 41042, (859) 525-4923;

4. Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701, (606) 435-6022;

5. London Regional Office, 875 South Main Street, London, Kentucky 40741, (606) 878-0157;

6. Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700, Owensboro, Kentucky 42303, (270) 687-7304; or

7. Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky 42003, (270) 898-8468. (27 Ky.R. 2611; Am. 3283; 28 Ky.R. 377; eff. 8-15-2001.)

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401 KAR 51:190. Banking and trading NOx allowances.

RELATES TO: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410

STATUTORY AUTHORITY: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation incorporates by reference the federal regulation that establishes a program for banking and trading of emission allowances to reduce nitrogen oxides (NOx) emissions under the federal NOx SIP Call. This administrative regulation is not more stringent nor otherwise different than the provisions of the federal mandate.

Section 1. For purposes of 40 CFR 96.10 to 96.14, 96.30, 96.31, 96.50 to 96.55 (b), 96.56 to 96.57, 96.60 to 96.62:

- (1) The administrator shall be the Administrator of the U.S. EPA;
- (2) The permitting authority shall be the cabinet;
- (3) The citations, Subpart E and 40 CFR 96.42(e) shall be 401 KAR 51:160, NOx requirements for large utility and industrial boilers; and
- (4) The citation Subpart I shall be 401 KAR 51:195, NOx opt-in provisions.

Section 2. Applicability. NOx budget units shall comply with the following requirements, which are incorporated by reference in Section 3 of this administrative regulation:

- (1) 40 CFR 96.10 to 96.14;
- (2) 40 CFR 96.30 to 96.31;
- (3) 40 CFR 96.50 to 96.55(b) and 96.56 to 96.57; and
- (4) 40 CFR 96.60 to 96.62.

Section 3. Incorporation by Reference.

- (1) The following material is incorporated by reference:

- (a) 40 CFR 96.10 to 96.14, "NOx Authorized Account Representative for NOx Budget Sources," as published in the Code of Federal Regulations, 40 CFR Part 96, July 1, 1999;
- (b) 40 CFR 96.30 to 96.31, "Compliance Certification," as published in the Code of Federal Regulations, 40 CFR Part 96, July 1, 1999;
- (c) 40 CFR 96.50 to 96.55(b) and 96.56 to 96.57, "NOx Allowance Tracking System," as published in the Code of Federal Regulations, 40 CFR Part 96, July 1, 1999; and

(d) 40 CFR 96.60 to 96.62, "NOx Allowance Transfers," as published in the Code of Federal Regulations, 40 CFR Part 96, July 1, 1999.

(2) This material may be inspected, copied, or obtained at the following offices of the Division for Air Quality, Monday through Friday, 8 a.m. to 4:30 p.m.:

(a) The Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601, (502)573-3382;

(b) Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky 41105, (606)920-2067;

(c) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky 42104, (270) 746-7475;

(d) Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence, Kentucky 41042, (859) 525-4923;

(e) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701, (606)435-6022;

(f) London Regional Office, 875 South Main Street, London, Kentucky 40741, (606)-878-0157;

(g) Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700, Owensboro, Kentucky 42303, (270) 687-7304; and

(h) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky, 42003 (270)898-8468.

(3) Copies of the Code of Federal Regulations (CFR) and the Federal Register (Fed. Reg.) are available for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (27 Ky.R. 2611; Am. 3285; eff. 8-15-2001.)

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401 KAR 51:195. NOx opt-in provisions.

RELATES TO: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410, 7661

STATUTORY AUTHORITY: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 40 CFR 51.121 as amended at 65 FR 11222 (March 2, 2000), 51.122, 72.2, 75.1, 75.2, 75.4, 75.11 to 75.13, 75.17, 75.19, 75.20, 75.24, 75.70, 75.72, 75.74, 75.75, Part 96, 42 USC 7410, 7661

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. The federal regulation incorporated by reference in this administrative regulation establishes provisions for individual sources to opt into the NOx Budget Trading Program. This administrative regulation is not more stringent nor otherwise different than the provisions of the federal mandate.

Section 1. For purposes of 40 CFR 96.80 to 96.88:

- (1) The administrator shall be the Administrator of the U.S. EPA;
- (2) The permitting authority shall be the cabinet;
- (3) The citations Subpart E, 96.4, 96.5, and 96.42, shall be 401 KAR 51:160;
- (4) The citations 96.20, 96.21(c), 96.22, and 96.23, shall be 401 KAR Chapter 52; and
- (5) The citation Subparts A through H shall be 401 KAR 51:001, 51:160, 51:170, 51:180, and 51:190.

Section 2. Applicability. Units that opt into the NOx Budget Trading Program shall comply with the requirements of 40 CFR 96.80 to 96.88, which is incorporated by reference in Section 3 of this administrative regulation.

Section 3. Incorporation by Reference.

- (1) 40 CFR 96.80 to 96.88, "Individual Unit Opt-ins," as published in the Code of Federal Regulations, 40 CFR Part 96, July 1, 1999, is incorporated by reference.
- (2) This material may be inspected, copied, or obtained at the following offices of the Division for Air Quality, Monday through Friday, 8 a.m. to 4:30 p.m.:
 - (a) The Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky, 40601, (502) 573-3382;
 - (b) Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky, 41105, (606) 920-2067;
 - (c) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky, 42104, (270) 746-7475;
 - (d) Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence, Kentucky, 41042, (859) 525-4923;

(e) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky, 41701, (606) 435-6022;

(f) London Regional Office, 875 South Main Street, London, Kentucky, 40741, (606) -878-0157;

(g) Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700, Owensboro, Kentucky, 42303, (270) 687-7304; and

(h) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky, 42003, (270) 898-8468.

(3) Copies of the Code of Federal Regulations (CFR) and the Federal Register (Fed. Reg) are available for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (27 Ky.R. 2614; Am. 3286; eff. 8-15-2001.)

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